

Road Safety

Considerations in Support of the 2030 Agenda for Sustainable Development

© 2017, United Nations

This work is available open access by complying with the Creative Commons licence created for intergovernmental organizations, available at http://creativecommons.org/licenses/by/3.0/igo/.

The findings, interpretations and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the United Nations or its officials or Member States.

The designation employed and the presentation of material on any map in this work do not imply the expression of any opinion whatsoever on the part of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Photocopies and reproductions of excerpts are allowed with proper credits.

This publication has not been formally edited.

United Nations publication issued by the United Nations Conference on Trade and Development.

UNCTAD/DTL/TLB/2017/4

Acknowledgements

This study was prepared by Anila Premti with the support of the Policy and Legislation Section, Division on Technology and Logistics, UNCTAD, and under the guidance of Jan Hoffmann, Chief of the Trade Logistics Branch, and Regina Asariotis, Chief of the Policy and Legislation Section. Valuable comments on earlier drafts of this report were provided by reviewers from the United Nations Economic Commission for Europe.

Table of contents

Ackno	owledgements	3
Table	e of contents	4
List o	f boxes	5
List o	f tables	5
Abbre	eviations	5-6
Execu	utive Summary	7-9
Introd	duction	10-12
1	Road safety targets and initiatives	12-15
	1.1 Global Plan for the Decade of Action for Road Safety 2011-2020	
	1.2 2030 Agenda for Sustainable Development	14-15
2	Road Safety facts, trends and challenges	15-19
3	International legal instruments on road safety	19-29
	3.1 Road traffic safety	20-25
	3.2 Vehicle harmonization	25-27
	3.3 Transport of dangerous goods	
	3.4 Road transport infrastructure	
	3.5 Other instruments	
4	Road safety and the 2030 Agenda, particularly in the context of infrastructure planning	
	4.1 Relevant MDB activities in developing countries	35
5	The role of selected United Nations agencies and other bodies in road safety	36-44
	5.1 United Nations Conference on Trade and Development (UNCTAD)	
	5.2 World Health Organization (WHO)	
	5.3 United Nations Economic Commission for Europe (UNECE)	
	5.4 United Nations Economic Commission for Africa (UNECA)	38
	5.5 United Nations Economic Commission for Latin America and the Caribbean (UNECLAC)	20
	5.6 United Nations Economic and Social Commission for Asia and the Pacific	50
	(UNESCAP)	39
	5.7 United Nations Economic and Social Commission for Western Asia (UNECWA)	
	5.8 Multilateral Development Banks (MDBs)	
	5.9 International Transport Forum (ITF) at OECD	40-42
	5.10 International Road Federation (IRF)	42
	5.11 International Road Union (IRU) Commission for Road Safety (CSR)	42-43
	5.12 Global Network for Road Safety Legislators	
	5.13 Sustainable Mobility for AllTM (SuM4AllTM) initiative	43-44
6	Concluding remarks and recommendations	44-46
	6.1 Legal and regulatory framework	44-45
	6.2 Infrastructure planning in support of road safety	45-46
	6.3 Data needs	46
Anne	x	47-50
Refer	rences	51-53

List of boxes

Box 1: Road safety findings	. 17-18
Box 2: Relevant paragraphs of the AAAA	.29-30
Box 3: Extract from one national road safety strategy and action plan	32
List of tables	
Table 1: Main international legal instruments related to road safety, open for worldwide membership	20
·	20
Table 2: Parties to the Convention on Road Traffic, of 19 September 1949 as at 30	21
November 2017	∠ 1
Table 3: Parties to the Convention on Road Traffic, of 8 November 1968 as at 30 November 2017	22
Table 4: Parties to the <i>Protocol on Road Signs and Signals, of 19 September 1949 as at</i>	
30 November 2017	24
Table 5: Parties to the Convention on Road Signs and Signals, of 8 November 1968 as at	
30 November 2017	. 24-25
Table 6: Parties to the Agreement on Uniform Technical Prescriptions, of 1958	
as at 30 November 2017	26
Table 7: Parties to the Agreement on Periodical Technical Inspections of Vehicles in use, 1997	
as at 30 November 217	26
Table 8: Parties to the Agreement on Global Technical Regulations on Vehicles, 1998, as at	
30 November 2017	.26-27
Table 9: Parties to the European Agreement Concerning the International Carriage of Dangerou.	s
Goods by Road (ADR), 1957, as at 30 November 2017	.27-28
Table 10: Consolidated list of Contracting Parties to the main UN road traffic safety instruments,	as
at 30 November 2017	.47-50

Abbreviations

AAAA Addis Ababa Action Agenda
CRS Commission for Road Safety
IRF International Road Federation
ITF International Transport Forum (at OECD)
IRU International Road Union
LDCs Least Developed Countries
MDBs Multilateral Development Banks

ROAD SAFETY - CONSIDERATIONS IN SUPPORT OF THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

OECD Organization for Economic Cooperation and Development

SIDS Small Island Developing States

UNCTAD United Nations Conference on Trade and Development

UNECE United Nations Economic Commission for Europe

UNECA United Nations Economic Commission for Africa

UNECLAC United Nations Economic Commission for Latin America and the Caribbean

UNECWA United Nations Economic and Social Commission for Western Asia

UNRSC United Nations Road Safety Collaboration

Executive Summary

In the field of transport, the focus of UNCTAD's work has been particularly on international maritime and multimodal transport, with the interests and needs of developing countries at the heart of its work and mandate. Transport is very important for trade and the global economy as it facilitates access to jobs and services, helps develop the economy and reduce poverty. Sustainable transport is essential to achieving most of the goals in the 2030 Agenda for Sustainable Development, especially those related to food security, health, energy, infrastructure and cities, human settlements, and climate change.

This report was prepared as part of UNCTAD's contribution to the progress of implementing road safety targets in the context of the 2030 Agenda for Sustainable Development. Every day more than 3,500 road deaths occur worldwide. Each year over 1.25 million people die, and an additional of up to 50 million are injured or permanently disabled in road accidents. 90 per cent of road traffic deaths occur in low and middle-income countries, although these countries have only 54 per cent of the world's vehicles. The large number of annual deaths from road traffic accidents, has been listed as one of the main challenges caused by unsustainable transport, along with the generation of almost a quarter of the greenhouse gas emissions by the transport sector.

The report concentrates on the relevant international regulatory framework, highlights the potential relevance of implementing existing conventions and other international legal instruments in the field of road safety, and overall, underlines the importance of a supportive legal and regulatory framework as a means for improving the achievement of the sustainable development goals. The report highlights a number of worldwide international legal instruments that aim to facilitate international road traffic by means of adoption of uniform road traffic rules, documents, signs and signals, construction and technical inspection of vehicles, road infrastructure, driving times and rest periods for professional drivers, and safe transport of dangerous goods and hazardous materials. Their implementation would bring safer mobility and behavior of road users, safer roads and safer vehicles. The report presents an overview of developing countries membership to these worldwide instruments, explains their legally binding nature among States that become Parties to them, and encourages their wide adoption and full application, in order to advance the swift implementation of targets related to road safety.

In addition, the report recognizes that both sustainable transport and sustainable, inclusive and high-quality infrastructure, are of cross-cutting importance for increasing economic growth, and attaining the sustainable development goals. It highlights the efforts, activities and initiatives undertaken by many international agencies and other bodies in the field of road safety, and aligns UNCTAD's role to these efforts, particularly pursuant to its renewed mandate, reflected in the Nairobi Maafikiano. In accordance with it, UNCTAD shall among others, continue its work in the field of transport and trade logistics, as well as its contribution to the effective implementation of international agreements and outcomes that recognize the role of transport infrastructure in the implementation of the 2030 Agenda, including the relevant outcomes of the Addis Ababa Action Agenda (AAAA).

Key points

Legal and regulatory framework

- Countries worldwide, and particularly developing countries, should consider acceding to and fully implementing the latest relevant versions of the United Nations legal instruments on road safety, as appropriate, in view of the fact that these reflect additions and updates to the international rules and requirements for road safety.
- Developing countries should strengthen their national road safety legislations, establish regional instruments and regulations, as appropriate, and work towards achieving greater consistency between those and the relevant international instruments.
- Collaboration among multiple stakeholders, including through regional and subregional organizations and institutions, should be strengthened. UNCTAD, alongside international organizations and bodies active in the field of road safety, could play a role by providing advice and assistance to policymakers and other stakeholders in developing countries, with respect to the effective implementation of the relevant international legal instruments at the national and/or regional level.

Infrastructure planning in support of road safety

- Infrastructure investment plans should continue to become a part of national sustainable development strategies. International organizations could potentially contribute to creating an enabling domestic environment in developing countries, by providing technical support to translate plans into concrete projects, and implement them. Road infrastructure safety elements and considerations should be included in these infrastructure projects. International organizations could also contribute with capacity building and skills development to ensure safe road design, road safety audits, and impact assessments.
- In view of the high urgency and sensitivity of the issue, governments of developing countries as well as their development partners, should integrate and mainstream road safety elements and considerations in support of the relevant sustainable development goals and targets, including target 3.6 of the 2030 Agenda for Sustainable Development, in relation to their infrastructure planning and projects, as soon as possible.
- In this context, it is also important to integrate climate considerations to enhance climate change adaptation and resilience for transport infrastructure.
- Governments and other stakeholders should embrace in their policies, actions known to be effective in reducing road safety risks, such as making cycling and walking safe and reducing the risks of motorized two-wheelers; as well as prioritize safety when adopting new technologies such as autonomous passenger cars or automated traffic control systems.
- Important input and contributions with respect to road safety matters, given by many international organizations and bodies, including Multilateral Development Banks, so far, have been very useful. In this context, UNCTAD expresses its readiness to continue to cooperate, while recognizing that future work in this field might require renewed efforts of funding and coordination.

Data needs

- Data and statistics have an important role to play in tracking progress on the implementation of the sustainable development goals and targets through agreed indicators.
- Obtaining more data and statistics, including through use of new technologies, and their analysis, has the potential to provide previously unavailable depth of insight on a wide range of issues related to road safety, and should be prioritized.
- New and existing data technology and associated knowledge and expertise could help among others, with risk assessment, employee training, and programme monitoring. For instance, through improved risk assessment, as vulnerabilities and possible negative events and incidents are better identified, responsible stakeholders would be more able to prioritize their actions and responses to reduce such risk as much as possible in the first place.
- Through better identifying risks and vulnerable areas, gaps in training and training needs could be identified as well. For such training to be effective, customized courses adapted to the stakeholders' needs, policies and practices, could be very useful and is recommended.
- In addition, monitoring and tracking progress of relevant programmes and projects in general, would benefit from such new data, technologies, and customized training, contributing to improving compliance and helping stakeholders achieve the set objectives, for implementing the sustainable development goals.

Introduction

Sustainable international maritime and multimodal transport, with particular focus on the interests and needs of developing countries, has been among the areas of UNCTAD's work and mandate. Transport is very important for trade and the global economy as it facilitates access to jobs and services, helps develop the economy and reduce poverty. Sustainable and resilient transport is key to sustainable development and is among the cross-cutting issues of relevance for achievement of progress on several of the sustainable development goals and targets, including target 1.5, goal 9, goal 13, and goal 14 that is particularly relevant in the context of maritime transport. Among others, pursuant to its renewed mandate, in accordance with the Nairobi Maafikiano, paragraph 100 (d), UNCTAD should continue to contribute to the effective implementation of international agreements and outcomes that recognize the role of transport infrastructure in the implementation of the 2030 Agenda. These include the relevant outcomes of the AAAA, particularly as they relate to transport infrastructure.

Sustainable transport is essential to achieving most of the goals in the 2030 Agenda for Sustainable Development. Although not represented by a dedicated sustainable development goal, sustainable transport is mainstreamed across several goals and targets, especially those related to food security, health, energy, infrastructure and cities, and human settlements. In addition, enhancing sustainability and climate change resilience, adaptation and disaster risk reduction for transport infrastructure in developing countries, in particular in LDCs and SIDS, will continue to be an important area of UNCTAD work in accordance with paragraphs 55 (k) and (l) of the Nairobi Maafikiano, creating synergies and co-benefits for the achievement of broader sustainable transport imperatives. This work also assists relevant countries to appropriately respond to the impacts of climate change and establish policy, regulatory and institutional frameworks that contribute to infrastructure development, thus supporting implementation of paragraphs 55 (f), and 76(f) and (t). In addition, through its advisory work on legal and regulatory issues, UNCTAD will continue to support the implementation of paragraph 38 (j) of the Nairobi Maafikiano.

Worth noting is the Global Sustainable Transport Conference, held on 27-28 November 2016 in Ashgabat, Turkmenistan,² which once again highlighted the importance of sustainable transport in promoting economic and social development while protecting the environment. The large number of annual deaths from road traffic accidents, was mentioned as one of the main challenges caused by unsustainable transport, along with the generation of almost a quarter of the greenhouse gas emissions by the transport sector.³ Road traffic deaths and injuries are particularly pressing issues

¹ For further information, see http://unctad.org/en/Pages/DTL/Trade-Logistics-Branch.aspx. For work on maritime and multimodal transport law and policy and related issues of ship-source pollution, ship and port security and safety, and the implications of climate change for maritime transport, see http://unctad.org/en/Pages/DTL/TTL/Legal.aspx. Paragraphs 10, 11 and 12 of the Nairobi Maafikiano (UNCTAD, 2016), are of general relevance to transport and trade facilitation and the following subparagraphs are of direct relevance: 38 (j), (k), (p), (s), (x) and (z); 55 (b), (f)–(l), (x), (aa) and (gg); 76 (d), (e), (f), (s) and (t); and 100 (d) and (t).

² For more information, see https://sustainabledevelopment.un.org/Global-Sustainable-Transport-Conference-2016. A useful contribution to the conference was the report of the United Nations Secretary-General's High-Level Group on Sustainable Transport (United Nations, 2016).

³ See the final document of the conference, available at https://sustainabledevelopment.un.org/content/documents/11987Ashgabatstatement.pdf, in particular paragraph 24.

faced by the transport sector, making road safety not only relevant but also a key priority. Every day more than 3,500 road deaths occur worldwide.⁴ Each year over 1.25 million people die in road accidents, a figure that has not changed significantly since 2007. In addition, up to 50 million are injured or permanently disabled in road accidents. 90 percent of road traffic deaths occur in low and middle-income countries, although these countries have only 54 percent of the world's vehicles (WHO, 2015a).

Road safety is also an important sustainable development issue as illustrated by its express inclusion in the 2030 Agenda for Sustainable Development, in targets 3.6 - aiming for the reduction of global road traffic deaths and injuries by 50 per cent by 2020; and 11.2 – aiming to provide access to safe, affordable, accessible and sustainable transport systems for all by 2030. The need for improving road safety has been acknowledged by the United Nations and its Member States for over 60 years, with extensive work being carried out particularly by the United Nations regional commissions, the World Health Organization (WHO), and the World Bank. More recently, road safety has been receiving increased international attention, including through the launch of relevant initiatives and activities. These include, the launch, in May 2011, in accordance with United Nations General Assembly resolution 64/255, of the Global Plan for the Decade of Action for Road Safety 2011-2020 (the Global Plan)⁵ (WHO, 2011), developed by the United Nations Road Safety Collaboration (UNRSC),⁶ providing an overall framework for activities aimed at stabilizing and then reducing the forecast level of road traffic fatalities around the world by 2020; and the appointment in 2015, of the United Nations Secretary-General's Special Envoy for Road Safety, Jean Todt, working to make road safety a priority worldwide, by helping mobilize sustained political commitment globally.

United Nations General Assembly resolution 70/260 on Improving global road safety, adopted in April 2016, reaffirmed adoption of the targets on road safety, specifically targets 3.6 and 11.2, and acknowledged reducing road traffic deaths and injuries as an urgent development priority. It also endorsed the outcome document of the second Global High-Level Conference on Road Safety, held in November 2015, the Brasilia Declaration on Road Safety. ⁸ The resolution invited two major development conferences - the United Nations Conference on Housing and Sustainable Urban Development (Habitat III, Quito, Ecuador, October 2016)⁹ and the 9th Global Conference on Health Promotion (Shanghai, China, November 2016)¹⁰ - to give appropriate consideration to road safety and sustainable mobility generally, while paying special attention to the needs of those in vulnerable situations, including people with disabilities. The resolution also called on governments to take a leading role in implementing the road safety-related SDG targets and the activities of the Decade of Action for Road Safety 2011-2020, as well as invited them and the international community to

⁴ See http://www.irap.org/en/about-irap/about-us. See also footnote 74.

⁵ For further information on the goals, road safety pillars and implementation, see UNECE (2015).

⁶ Established as a follow up to General Assembly Resolution 58/289 of April 2004, recognizing the need for the United Nations system to support efforts to address the global road safety crisis. UNRSC is chaired by the WHO with the UN regional commissions rotating as vice chairs. It is an informal consultative mechanism which has brought together international organizations, governments, NGOs and private sector entities to coordinate effective responses to road safety issues and provide good practice guidelines since 2004.

⁷ For more information, see <a href="http://www.unece.org/un-sgs-special-envoy-for-road-safety/un-sgs-special-envoy-for-ro

⁸ Available at http://www.who.int/violence injury prevention/road traffic/Final Brasilia declaration EN.pdf?ua=1

⁹ See http://habitat3.org/

¹⁰ See http://www.who.int/healthpromotion/conferences/9gchp/en/

intensify both national and international collaboration with a view to meeting the ambitious road safety-related targets in the 2030 Agenda for Sustainable Development.¹¹

It is also worth noting in this context that among other goals and targets in the 2030 Agenda for Sustainable Development, goal 9, on building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation, is particularly relevant in the context of transport infrastructure. Progressing towards improving transport infrastructure, particularly road transport infrastructure, will not only contribute to getting closer to the road safety fatality reduction in target 3.6, but will have important benefits that relate to other goals and targets as well. Transport infrastructure is long-lasting, and so are the impacts that related measures taken by countries at the local and national level, have on cities, urban development, environment, and climate change. On the other hand, sustainable transport helps create the infrastructure on which a sustainable future can be built. "It provides access to trade, jobs, markets, education, health care and other services that contribute to better lives. It empowers women, persons with disabilities and other vulnerable groups." 12

The first part of this report provides an outline of the main road safety targets and initiatives, while the second part presents relevant road safety facts, trends and challenges. The third part summarizes the relevant international legal instruments in the field of road safety, open for worldwide membership, encourages accession to the most recent ones, particularly by developing countries, and underlines the importance of their wide implementation. The fourth part of the report highlights the relevance of road safety targets for the implementation of the 2030 Agenda for Sustainable Development, particularly in the context of infrastructure planning, while the fifth part lists the roles and activities of selected United Nations agencies and other bodies active in the field of road safety. Finally, the concluding remarks provide a few insights and recommendations on the way forward, particularly for developing countries.

1. Road transport safety targets and initiatives

1.1 Global Plan for the Decade of Action for Road Safety 2011-2020

United Nations General Assembly resolution 64/255 on Improving global road safety, adopted in March 2010, in addition to proclaiming the period 2011–2020 as the Decade of Action for Road Safety, "with a goal to stabilize and then reduce the forecast level of road traffic fatalities around the world by increasing activities conducted at the national, regional and global levels" (paragraph 2), calls upon Member States to implement road safety activities, "particularly in the areas of road safety management, road infrastructure, vehicle safety, road user behavior, including distractions in traffic, road safety education and post-crash care" (paragraph 6).

¹¹ Earlier United Nations General Assembly resolutions on Improving global road safety include 68/269 (2014), 66/260 (2012), 64/255 (2010), 62/244 (2008), 60/5 (2005), and 58/289 (2004).

¹² For more information, see, https://sustainabledevelopment.un.org/?page=view&nr=1131&type=230&menu=2059

According to the Global Plan, activities over the Decade should take place at the local, national, regional and global levels, with the primary focus at local level actions. At the *national and local level*, countries are encouraged to implement activities according to five pillars below:

Pillar 1: Road safety management – Including by adhering to and/or fully implementing UN legal instruments and encourage the creation of regional road safety instruments.

*Pillar 2: Safer roads and mobility – By r*aising the safety and protective quality of road networks for the benefit of all road users, especially the most vulnerable (e.g. pedestrians, bicyclists and motorcyclists).

Pillar 3: Safer vehicles – By encouraging universal deployment of improved vehicle safety technologies.

Pillar 4: Safer road users – By developing comprehensive programmes to improve road user behavior.

Pillar 5: Post crash response – By increasing responsiveness for post-crash emergencies and improving treatment and longer-term rehabilitation for crash victims (WHO (2011), pages 12-17).

As regards *international* road safety coordination and activities, the WHO and the United Nations regional commissions will coordinate regular monitoring, within the framework of the United Nations Road Safety Collaboration (UNRSC), of global progress towards meeting the targets identified in the plan of action. Relevant activities include the following:

Activity 1: Encourage, where appropriate, an increase in funding for road safety.

Activity 2: Advocate for road safety at the highest levels and facilitate collaboration among multiple stakeholders, including NGOs and international financial institutions.

Activity 3: Increase awareness of risk factors and the need for enhanced prevention of road traffic crashes.

Activity 4: Provide guidance to countries on strengthening road safety management systems and implementing road safety good practices and trauma care.

Activity 5: Improve the quality of road safety data collected (WHO (2011), pages 18-19).

To track progress towards the implementation of the targets of the Global Plan, and target 3.6 for halving road traffic deaths and injuries by 2020, every two years, the Secretary-General of the United Nations, transmits a report on improving global road safety, prepared by WHO in consultation with the United Nations regional commissions and other partners of the UNRSC. The report provides an update on the implementation of the recommendations contained in General Assembly resolutions

on Improving global road safety,¹³ including a description of activities and achievements by the global road safety community, under each of the five pillars, in pursuance of the objectives of the Decade of Action, since the previous report, as well as provide recommendations, including for the General Assembly. For instance, the two most recent reports (A/70/386 (2015) and A/72/359 (2017)), took stock of activities and events by Governments and other stakeholders to implement the recommendations made in the relevant United Nations resolutions and to meet the goals of the Decade of Action. The reports continued to draw the attention of Governments and other stakeholders to the problem of road traffic accidents and their consequences for public health and development, and called for more action needed to be undertaken to meet the sustainable development goals of reducing road traffic deaths, and in particular with regard to protecting vulnerable road users, enacting and enforcing good road safety laws and addressing vehicle and infrastructure safety. The reports have also recognized that more funding is needed to support road safety activities during the Decade of Action and beyond.¹⁴

1.2 2030 Agenda for Sustainable Development

With the adoption of the 2030 Agenda for Sustainable Development in September 2015, road safety was expressly included as an important sustainable development issue, in targets 3.6 and 11.2, related to health and cities. Target 3.6 pledges to halve by 2020 "the number of global deaths and injuries from road traffic accidents," serving as an incentive for action by the international community towards accelerating progress in achieving a much-needed reduction in global road traffic deaths. Target 11.2 calls on providing, by 2030, "access to safe, affordable, accessible and sustainable transport systems for all, improving road safety". In addition, target 9.1 calls for developing "quality, reliable, sustainable and resilient infrastructure", including through investments in transport infrastructure. The goals and related targets being universal in nature and applicable to all United Nations Member States, represent strong international road safety commitments, and a renewed momentum for the Decade of Action for Road Safety 2011-2020.

Road safety is also an important development issue because road accidents, in addition to being a major public health issue, causing human deaths and injuries, also bring costs and economic losses, including those arising from medical treatment, lost productivity for those disabled, and time off work or school taken by family members to care for the injured. According to UNECE (2015a), road traffic accidents cost at least one per cent of the world's gross domestic product (GDP), or roughly US\$ 750 billion per year. In addition, progressing towards achieving the road safety target, will have important benefits that relate to other sustainable development goals, including those related to transport and climate change.

The achievement of target 3.6, to halve the number of road traffic fatalities by 2020, would mean reducing them to about 600,000 compared to the 1.25 million. This is very ambitious compared to previous targets. The Decade of Action goal was to first stabilize and then reduce the projected increase of fatalities to around 1 million a year by 2020 – a less than 20 percent reduction.

¹³ See footnote 11 above.

¹⁴ See paragraphs 76 and 77 of the 2015 report as well as 98 and 99 of the 2017 report.

Unfortunately, by the end of the Decade of Action mid-term in 2015,¹⁵ no significant change was observed in the number of global annual road traffic deaths. More than half of the countries had not met this lower target, while in many low and middle-income countries death rates had actually been increasing (The Guardian, 2015). Hence, the actual situation of road traffic fatalities remains unacceptable, and needs to change.

As for other sustainable development goals and targets, to ensure the implementation of the targets related to road safety, a robust follow-up and review mechanism, accompanied by a solid framework of indicators and statistical data to monitor progress, is needed. A global indicator framework¹⁶ was adopted by the General Assembly in July 2017 and is contained in the General Assembly resolution on Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development (A/RES/71/313).

2. Road safety facts, trends and challenges

According to WHO (2017a), some of the latest key facts on road traffic injuries include the following:

- About 1.25 million people die each year as a result of road traffic crashes. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injury.
- Road traffic injuries are the leading cause of death among people aged between 15 and 29 years. People aged between 15 and 44 years account for 48 per cent of global road traffic deaths. From a young age, males are more likely to be involved in road traffic crashes than females. About three quarters (73 per cent) of all road traffic deaths occur among young males under the age of 25 years who are almost 3 times as likely to be killed in a road traffic crash, as young females.
- 90 per cent of the world's fatalities on the roads occur in low- and middle-income countries, even though these countries have approximately 54 per cent of the world's vehicles. Road traffic injury death rates are highest in the African region. Even within high-income countries, people from lower socioeconomic backgrounds are more likely to be involved in road traffic crashes. According to the Global Health Observatory (GHO) data (www.who.int/gho/road_safety/en/), presenting road traffic death rate by WHO region and income level: In 2013, low- and middle-income countries had higher road traffic fatality rates per 100.000 population (24.1 and 18.4, respectively) compared to high-income countries (9.2). The African region had the highest road traffic fatality rate, at 26.6, while the European region had the lowest rate, at 9.3.
- Nearly half of those dying on the world's roads are "vulnerable road users": pedestrians, cyclists, and motorcyclists.
- Road traffic crashes cost most countries 3 per cent of their gross domestic product (GDP).

¹⁵ Progress with the Decade was reviewed at the Second Global High-Level Conference on Road Safety held in Brasilia in 2015, and through bi-annual United Nations General Assembly debates. The next review will take place in April 2018.

¹⁶ Developed by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) and agreed upon, after some refinements, at the 48th session of the United Nations Statistical Commission held in March 2017. For more information on the SDG indicators, also see https://unstats.un.org/sdgs/indicators/database/.

- Without sustained action, road traffic crashes are predicted to become the seventh leading cause of death by 2030.
- The newly adopted 2030 Agenda for Sustainable Development has set an ambitious target of halving the global number of deaths and injuries from road traffic crashes by 2020.

According to the recently released Global Mobility Report 2017 (World Bank, 2017):

- Road transport accounts for 97 percent of the deaths and 93 percent of the costs.
- On roads, the fatality risk for motorcyclists is 20 times higher than for car occupants, followed by cycling and walking, with 7 to 9 times higher risk than car travel, respectively.
 Bus occupants are 10 times safer than car occupants. Rail and air are the safest transport modes.
- Globally, 40 to 50 percent of traffic fatalities occur in urban areas.
- Evidence suggests that the highest fatality rates occur in cities in the developing world—the proportion of fatalities in urban areas is high and rising in low- and middle- income
- Unsafe mobility in any of the transport modes can pose significant public health risks, and can lead to social and economic losses.

Road crashes are estimated to cost countries USD 1,800 billion, or 3 per cent of GDP globally, while in low- and middle-income countries, economic losses are equivalent to 5 per cent of GDP or USD 1,000 billion per year (WHO, 2015b). In addition, while steady improvement progress is being observed in select income countries during 2001-2010, in many low- and middle-income countries a trend of increasing death rates has been observed during the same period. Also in terms of numbers, while many countries are making progress, the situation is deteriorating in many others, low- and middle-income countries in particular.

Unfortunately, activities undertaken, and investments made so far, have proved inadequate to stop or reverse the rise in road traffic deaths, and the target of halving the number of global deaths and injuries from road traffic accidents appears to be unlikely to be achieved by 2020. Major immediate challenges identified include: very limited application of effective road safety policies and legislation, and/or minimum standards for vehicle and road construction, particularly by low and middle-income countries; and inadequate funding for global road safety initiatives, which is far below the estimated \$770 million per year required to achieve the reductions in road fatalities and serious injuries envisaged by the SDGs (TowardsZeroFoundation, 2017).

Road safety depends on human/driver behavior, vehicle safety, infrastructure quality, and the regulatory framework. It is worth noting that to accommodate human error, the Safe System approach to road safety has been embraced by the WHO and other bodies active in the field, including as part of the Global Plan. The concept of a Safe System, in the context of road safety, originated in Sweden and the Netherlands in the 1980s and 1990s, when "scientists and policy makers began to question the prevailing view that the safety of road users was, in the last instance, their own responsibility and that the task of road safety policy was thus primarily to influence road users' behaviour so they would act safely at all times. Yet as the decades-long decreases in the number of road fatalities and severe injuries were levelling out, it became clear a predominant focus on education, information, regulation and enforcement was no longer delivering progress. A rethink was needed" (OECD/ITF, 2016).

The Safe System approach aims to ensure a safe transport system for all road users, and "takes into account people's vulnerability to serious injuries in road traffic crashes and recognizes that the system should be designed to be forgiving of human error" (WHO, 2017a). The main elements of this approach are safe roads and roadsides, safe speeds, safe vehicles, and safe road users, all of which must be addressed, in order to eliminate fatal crashes and reduce serious injuries. Main risk factors include: speeding; driving under the influence of alcohol and other psychoactive substances; nonuse of motorcycle helmets, seat-belts, and child restraints; distracted driving; unsafe road infrastructure; unsafe vehicles; inadequate post-crash care; and inadequate enforcement of traffic laws.

Box 1: Recent road safety findings

According to the WHO (2017a), UNECE (2015b) and ITF (2017b):

- Inappropriate or excessive speed is reported behind around 30 per cent of fatal road crashes. An increase of 1 km/h in mean vehicle speed results in an increase of 3 per cent in the incidence of crashes resulting in injury and an increase of 4–5 per cent in the incidence of fatal crashes. An adult pedestrian's risk of dying is less than 20 per cent if struck by a car at 50 km/h and almost 60 per cent if hit at 80 km/h. In the UNECE region, many countries have now reduced the speed limits within towns to 50 km/h, and in some urban areas to 30 km/h. In motorways, it varies between 100 km/h and 130 km/h.
- Nearly all countries indicate that drink-driving is a major contributor in fatal crashes, which in many of them is about one third of all fatal crashes. In the case of drink-driving, the risk of a road traffic crash starts at low levels of blood alcohol concentration (BAC) and increases significantly when the driver's BAC is \geq 0.04 g/dl. The majority of UNECE countries apply a maximum BAC of 0.05 per cent. In the case of drug-driving, the risk of incurring a road traffic crash is increased to differing degrees depending on the psychoactive drug used. For example, the risk of a fatal crash occurring among those who have used amphetamines is about 5 times the risk of someone who hasn't.
- Wearing a motorcycle helmet correctly can reduce the risk of death by almost 40 per cent and the risk of severe injury by over 70 per cent. Wearing helmets for all cyclists is compulsory only in few countries (e.g. Australia, Finland and New Zealand) and few countries require helmet use for children.
- -Wearing a seat-belt reduces the risk of a fatality among front-seat passengers by 40–50 per cent and of rear-seat passengers by between 25–75 per cent. A majority of countries have mandatory seatbelt laws for the front seats, and many have them also for rear car seats. However, in UNECE countries for instance, despite high levels of compliance, there is still a difference in seatbelt usage between the seatbelt usage between the front and the rear car seats, with values typically ranging between 80 and 100 per cent for front seats and between 3 and 90 per cent for rear seats.
- If correctly installed and used, child restraints reduce deaths among infants by approximately 70 per cent and deaths among small children by between 54 per cent and 80 per cent.
- Among many types of distractions that can lead to impaired driving, the one caused by mobile phones is a growing concern for road safety. Drivers using mobile phones are approximately 4 times more likely to be involved in a crash than drivers not using a mobile phone. Hands-free phones are not much safer than handheld phone sets, and texting considerably increases the risk of a crash. Many countries have laws prohibiting the use of hand-held mobile phones while driving, however there are many drivers that still use hand-held and hand-free mobile phones in these countries.
- As regards road infrastructure, ideally, roads should be designed keeping in mind the safety of all road users. This would mean making sure that there are adequate facilities for pedestrians, cyclists, and motorcyclists.

Measures such as footpaths, cycling lanes, safe crossing points, and other traffic calming measures can be critical to reducing the risk of injury among these road users. According to data from the Asian Highway Database of UNESCAP, primary class Asian Highway roads have the best safety record, while those below class III have the worst record. The upgrading of roads to access-controlled primary class had significant benefits in reducing fatality rates.

- Safe vehicles play a critical role in averting crashes and reducing the likelihood of serious injury. There are a number of UN regulations on vehicle safety that, if applied to countries' manufacturing and production standards, would potentially save many lives. These include requiring vehicle manufacturers to meet front and side impact regulations, to include electronic stability control (to prevent over-steering) and to ensure airbags and seat-belts are fitted in all vehicles. Without these basic standards, the risk of traffic injuries both to those in the vehicle and those out of it is considerably increased.
- Care of injuries after a crash has occurred is extremely time-sensitive: delays of minutes can make the difference between life and death.
- If traffic laws are not enforced or are perceived as not being enforced it is likely they will not be complied with and therefore will have very little chance of influencing behaviour. Effective enforcement includes establishing, regularly updating, and enforcing laws at the national, municipal, and local levels that address the abovementioned risk factors. It includes also the definition of appropriate penalties.

As already noted, road safety depends on a number of factors, including driver behavior, infrastructure quality, vehicle safety measures as well as the regulatory environment. Therefore, improvements can be achieved only by considering all these factors. According to UNECE (2015b), key challenges that affect road safety and performance include: very slow or lack of improvement of road safety on a global level; ineffective road safety management; weak regulatory frameworks and underfunded road safety management at national and local levels; insufficient maintenance of road infrastructure with clear road signs and markings; application of traffic rules that is often not tailored to the local environment, e.g. category of road; lack of periodic vehicle maintenance; overrepresented motorcycle, bicycle and pedestrian casualties in road accidents, which have not been adequately addressed; lack of or insufficient public transport, traffic management and safe infrastructure for pedestrians and cyclists; lack of collection of road safety data in accordance with international standards; insufficient insurance coverage in many countries; and the need for improvement of post-crash trauma care.

Road safety laws that can be effective in improving road user behavior and reduce road traffic injuries and deaths, relate particularly to the main risk factors for road safety, namely: speed, drink-driving, the use of motorcycle helmets, seat-belts and child restraints. Between 2008 and 2011, 35 countries adopted new laws to address key risk factors, showing that concrete progress can be made. However, by 2013, only 28 countries, covering only 7 per cent of the world's population, had comprehensive road safety laws on the five key risk factors (WHO, 2013). In 2015, it was reported that since 2013, 17 countries representing 5.7 per cent of the world's population had amended their laws, aligning at least one of them, with best practices on the five key risk factors. Nonetheless, many countries lag far behind in terms of ensuring their laws meet international standards. In addition, more effort needed to be placed in optimizing enforcement efforts to improve the potential of road safety laws to reduce injuries and deaths (WHO, 2015b).

In addition, safe vehicles play an important role in preventing road accidents. However, while there has been progress towards improving road safety legislation and in making vehicles safer, the pace of legislative change has been too slow. By 2015, 80 per cent of countries around the world, mainly low and middle-income countries still fail to meet even the most basic international standards on vehicle safety (WHO, 2015b). Also, most of the recent reductions in fatalities are related to car drivers/passengers, probably due to the increased passive safety of cars, improved speed management and more effective drink-driving policies. However, statistics are still unsatisfactory for vulnerable road users (ITF, 2014). Actually, almost half of those that die in road traffic crashes are among those with the least protection, namely motorcyclists (23 per cent), pedestrians (22 per cent) and cyclists (4 per cent). The poorer economies of the world have the highest proportion of pedestrian and cyclist deaths, with the African Region at 43 percent (WHO, 2015b). Many roads in low- and middle-income countries lack safe infrastructure, notably for pedestrians and cyclists. In this context, the needs of all these road users need to be taken into consideration when making policy decisions and enacting laws related to road safety.

Thus, to save lives, every country needs to implement minimum United Nations vehicle safety standards, as well as promote the use of walking and cycling, accompanied by effective speed management and pedestrian and cycling facilities. Governments need to limit the import and sale of sub-standard vehicles in their countries. Other areas in need of improvement for improving road safety include: improving the quality of data on road traffic injuries and harmonizing data in line with international standards; having a lead agency with the authority and resources to develop a national road safety strategy whose implementation they oversee; as well as improving the quality of care that is available to those who suffer a road traffic injury. Another important road safety factor, namely infrastructure quality, will be dealt with in greater detail in Part 5 below.

3. International legal instruments on road safety

The main international conventions and other instruments related to road safety, negotiated and adopted by governments under the auspices of United Nations Economic Commission for Europe (UNECE), ¹⁷ include those aiming to facilitate international road traffic through: the adoption of uniform road traffic rules, documents, signs and signals; harmonization of construction standards and technical inspection of vehicles; safe transportation of dangerous goods and hazardous materials; setting of driving times and rest periods for professional drivers; and improvement of road infrastructure.

A number of these instruments, considered as global ones, are open for accession not only by UNECE Member States, but also by Member States of the United Nations and by any other eligible State, upon invitation.¹⁸ They are legally binding for those States that become Parties to them. As evidenced by

¹⁷ For a full list and information on the UNECE instruments, see http://www.unece.org/leginstr/trans.html.

¹⁸ Some of the instruments, particularly the first four ones on road traffic safety, listed in Table 1 below, in addition to all United Nations Member States, allow accession by any other State invited by the General Assembly of the United Nations to become a Party to them. The other instruments listed in the table, in addition to UNECE Member States, allow accession for all countries Members of the United Nations invited by the UNECE to participate in a consultative capacity in its consideration

their membership, in addition to being important for building uniform transport regulations in European countries, these legal instruments are also applied by many other countries worldwide.¹⁹

Table 1. Main international legal instruments related to road safety, open for worldwide membership

- 1. Convention on Road Traffic, of 19 September 1949
- 2. Convention on Road Traffic, of 8 November 1968
- 3. Protocol on Road Signs and Signals, of 19 September 1949
- 4. Convention on Road Signs and Signals, of 8 November 1968
- 5. 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, of 1958.
- 6. Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections, of 13
- 7. November 1997
 - Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles,
- 8. Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles, of 1998
 European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)

Main international legal instruments on road safety, may be sub-categorized as follows:

3.1 Road traffic safety

- Convention on Road Traffic, of 19 September 1949. Entry into force: 26 March 1952; Signatories: 19 (6 developing countries); Parties: 97 (57 developing countries).²⁰
- Convention on Road Traffic, of 8 November 1968. Entry into force: 21 May 1977; Signatories: 36 (12 developing countries); Parties: 75 (30 developing countries).

These two Conventions aim to facilitate international road traffic and increase road safety through the adoption of uniform road traffic rules. They require among others, that countries respect foreign driving permits, and adopt international driving permits whose models are determined by agreements. The 1968 Convention introduced certain additions and updates concerning international road traffic and requirements for motor transport and documentation. Upon entry into force in 1977, it terminated and replaced, in relations between States Parties, the 1949 Convention. The 1968 Convention, containing the latest rules on all aspects of international road traffic and safety, and promoting safe user behavior (e.g. what drivers and pedestrians must do at crossings and intersections), may serve as a reference for national legislations.

Currently, 43 countries, including 15 developing countries, are Parties to both Conventions (see Table 3). For these countries, the 1968 Convention applies. The 54 Parties to the 1949 Convention, including 42 developing countries, which have not ratified the 1968 Convention, remain Parties only to the 1949 Convention (see Table 2), while 32 countries, including 15 developing countries, are parties only to

http://unctadstat.unctad.org/EN/Classifications/DimCountries_DevelopmentStatus_Hierarchy.pdf

of any matter of particular concern to that non-member. For the specific language used in each instrument, see their sections on "Final Provisions" and/or on "Contracting Parties and consultative status". See also UNECE (2009), paragraph 11.

¹⁹ For information on the latest status of these instruments, see the United Nations Treaty Collection website, Chapter XI (B), available at https://treaties.un.org/Pages/Treaties.aspx?id=11&subid=B&lang=en.

²⁰ Classification of countries is based on the UNCTAD Statistics *Development status grouping and composition*, Generation date:

6 June 2017, Available at

the 1968 Convention (see Table 3). 9 developing countries have only signed the 1968 Convention, but have not ratified it (see Table 3).

Table 2. Parties to the Convention on Road Traffic, of 19 September 1949 as at 30 November 2017

97 Parties to the	Convention on Road Traffic, of 19	September 1949
Albania	Haiti	Peru
Algeria	Holy See	Philippines
Argentina	Hungary	Poland
Australia	Iceland	Portugal
Austria	India	Republic of Korea
Bangladesh	Ireland	Romania
Barbados	Israel	Russian Federation
Belgium	Italy	Rwanda
Benin	Jamaica	San Marino
Botswana	Japan	Senegal
Bulgaria	Jordan	Serbia
Burkina Faso	Kyrgyzstan	Sierra Leone
Cambodia	Lao People's Democratic	Singapore
Canada	Republic	Slovakia
Central African Republic	Lebanon	Slovenia
Chile	Lesotho	South Africa
Congo	Luxembourg	Spain
Cote d'Ivoire	Madagascar	Sri Lanka
Cuba	Malawi	Sweden
Cyprus	Malaysia	Syrian Arab Republic
Czech Republic	Mali	Thailand
Democratic Republic of the	Malta	Togo
Congo	Monaco	Trinidad and Tobago
Denmark	Montenegro	Tunisia
Dominican Republic	Morocco	Turkey
Ecuador	Namibia	Uganda
Egypt	Netherlands	United Arab Emirates
Fiji	New Zealand	United Kingdom of Great
Finland	Niger	Britain and Northern Ireland
France	Nigeria	United States of America
Georgia	Norway	Venezuela (Bolivarian
Ghana	Papua New Guinea	Republic of)
Greece	Paraguay	Viet Nam
Guatemala		Zimbabwe

Note: Names of developing countries appear in italics.

Names of States that are Parties only to the 1949 Convention on Road Traffic are highlighted in bold. Switzerland is the only State that has only signed but not ratified the 1949 Convention on Road Traffic.

Table 3. Parties to the Convention on Road Traffic, of 8 November 1968 as at 30 November 2017

75 Parties to the Convention on Road Traffic, of 8 November 1968			
Albania	Hungary	Republic of Moldova	
Armenia	Iran (Islamic Republic of)	Romania	
Austria	Iraq	Russian Federation	
Azerbaijan	Israel	San Marino	
Bahamas	Italy	Saudi Arabia	
Bahrain	Kazakhstan	Senegal	
Belarus	Кепуа	Serbia	
Belgium	Kuwait	Seychelles	
Bosnia and Herzegovina	Kyrgyzstan	Slovakia	
Brazil	Latvia	Slovenia	
Bulgaria	Liberia	South Africa	
Central African Republic	Lithuania	Sweden	
Cote d'Ivoire	Luxembourg	Switzerland	
Croatia	Monaco	Tajikistan	
Cuba	Mongolia	The Former Yugoslav Republic	
Czech Republic	Montenegro	of Macedonia	
Democratic Republic of the	Morocco	Tunisia	
Congo	Netherlands	Turkey	
Denmark	Niger	Turkmenistan	
Estonia	Norway	Ukraine	
Finland	Pakistan	United Arab Emirates	
France	Peru	Uruguay	
Georgia	Philippines	Uzbekistan	
Germany	Poland	Viet Nam	
Greece	Portugal	Zimbabwe	
Guyana	Qatar		

Note: Names of developing countries appear in italics.

States that are Parties to both the 1949 and 1968 Conventions on Road Traffic are highlighted in bold. States that have only signed but not ratified the 1968 Convention on Road Traffic, are Chile, Costa Rica, Ecuador, Ghana, Holy See, Indonesia, Mexico, Republic of Korea, Thailand, United Kingdom of Great Britain and Northern Ireland, and Venezuela (Bolivarian Republic of).

- *Protocol on Road Signs and Signals, of 19 September 1949*. Entry into force: 20 December 1953; Signatories: 14 (3 developing countries); Parties: 39 (13 developing countries)
- *Convention on Road Signs and Signals, of 8 November 1968*. Entry into force: 6 June 1978; Signatories: 35 (12 developing countries); Parties: 65 (22 developing countries)

These two instruments are designed to increase road safety and ensure safe infrastructure, contributing to safer roads and mobility by setting up a set of commonly agreed road signs and signals, traffic lights and road markings, in use internationally. The 1968 Convention revised and substantially extended the earlier 1949 Protocol, and both instruments reflect a common consensus on road traffic signs that evolved primarily in Europe in the mid-20th century. Upon entry into force in 1978, the 1968 Convention terminated and replaced, in relations between States Parties, the 1949 Protocol. Among others, the 1968 Convention classifies road signs into three groups: danger warning, regulatory and informative. It also

defines them, and describes their physical appearance. The Convention has been kept updated over the years. For instance, one of the amendments that entered into force in 2006, was on priority in roundabouts and signs in tunnels.

Currently, 25 States, including 3 developing countries (see Table 5), are Parties to both the 1949 Protocol and the 1968 Convention. Therefore, for these countries, the 1968 Convention applies. The 13 Parties to the 1949 Protocol, including 10 developing countries (see Table 4), that have not ratified the 1968 Convention, remain Parties only to the 1949 Protocol, while 40 States, including 19 developing countries, are parties only to the 1968 Convention on Road Signs and Signals (see Table 5).

To be accepted in as many countries as possible, the 1968 Convention on Road Signs and Signals allows for some variations.²¹ Most European countries, except eight²² are Parties to it. Other countries, mainly in Africa, although not Parties to it, follow many of its rules. A parallel instrument, called *the South African Development Community – Road Traffic Signs Manual (SADC-RTSM)*,²³ has been adopted by countries in southern Africa,²⁴ and follows many similar rules and principles as in the 1968 Convention on Road Signs and Signals.

In addition, many jurisdictions outside Europe, have adopted neither the 1949 Protocol nor the 1968 Convention, and maintain their own systems of road traffic signals. For example, *the U.S. Manual on Uniform Traffic Control Devices (MUTCD)*²⁵ does not follow the symbol rules adopted by the 1968 Convention. MUTCD has also influenced road signs used by other countries, mainly in the American continent. Eight of these, all of which developing countries, have signed the 1968 Convention, but only three have ratified it. Nonetheless, nearly all these countries use the MUTCD-style yellow diamond warning signs. Other non-American countries use road signs similar to the MUTCD, although driving on the left.

UNECE (2017a) observed that 32 per cent of countries worldwide have not acceded to any road safety legal instruments. These include 18 percent of countries (9) in Asia, 47 per cent of countries (26) in Africa, 45 per cent of countries (15) in the Americas and 32 per cent of countries (11) in the Pacific, which are equivalent to almost 14 per cent of the world's population (approx.1 billion people). They have also estimated that with the accession of the 3 largest countries in the analysis, namely Indonesia, Mexico and Ethiopia, the population not covered by any United Nations road safety conventions would almost halve.

²¹ E.g. in the shape and/or colour of certain signs and markings.

²² Andorra, Holy See, Iceland, Ireland, Liechtenstein, Malta, Spain, and the United Kingdom of Great Britain and Northern Ireland. Holy See, Spain and the United Kingdom are parties only to the 1949 Protocol. Countries in Europe that are not signatories to the Convention are Andorra, Iceland, Ireland, Liechtenstein and Malta.

²³ Available at http://www.nra.co.za/content/V1-SADC-RTSM-Uniform-Traffic-Control-Devices-160412.pdf?Session ID=a98b8162f7a1dbfad23b9b2ab0c21526

²⁴ SADC member countries include Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe. Democratic Republic of the Congo and Seychelles, are Parties to the 1968 Convention.

²⁵ Available at http://mutcd.fhwa.dot.gov/pdfs/2009/mutcd2009edition.pdf

²⁶ With signs for speed limits and forbidden parking being among the most visible differences.

²⁷ Brazil, Chile, Costa Rica, Cuba, Ecuador, Guyana, Mexico, and Venezuela (Bolivarian Republic of).

²⁸ Chile, Cuba, and Guyana.

²⁹ Australia, Indonesia, Ireland, Japan, Malaysia, and New Zealand.

Table 4. Parties to the Protocol on Road Signs and Signals, of 19 September 1949 as at 30 November 2017

39 Parties to the Protocol on Road Signs and Signals, of 19 September 1949		
Austria	Greece	Romania
Belgium	Haiti	Russian Federation
Bulgaria	Holy See	Rwanda
Burkina Faso	Hungary	San Marino
Cambodia	Italy	Senegal
Cuba	Kyrgyzstan	Serbia
Czech Republic	Luxembourg	Slovakia
Denmark	Monaco	Spain
Dominican Republic	Montenegro	Sweden
Ecuador	Netherlands	Thailand
Egypt	Niger	Tunisia
Finland	Poland	Uganda
France	Portugal	United Kingdom of Great Britain
		and Northern Ireland

Note: Names of developing countries appear in italics.

Names of States that are Parties only to the 1949 Protocol on Road Signs and Signals are highlighted in bold. States that have only signed but not ratified the 1949 Protocol on Road Signs and Signals, are India, Israel, Lebanon, Norway, and Switzerland.

Table 5. Parties to the Convention on Road Signs and Signals, of 8 November 1968 as at 30 November 2017

Albania	Guyana	Republic of Moldova
Austria	Hungary	Romania
Azerbaijan	India	Russian Federation
Bahrain	Iran (Islamic Republic of)	San Marino
Belarus	Iraq	Senegal
Belgium	Italy	Serbia
Bosnia and Herzegovina	Kazakhstan	Seychelles
Bulgaria	Kuwait	Slovakia
Central African Republic	Kyrgyzstan	Slovenia
Chile	Latvia	Sweden
Cote d'Ivoire	Liberia	Switzerland
Croatia	Lithuania	Tajikistan
Cuba	Luxembourg	The Former Yugoslav Republic o
Cyprus	Mongolia	Macedonia
Czech Republic	Montenegro	Tunisia
Democratic Republic of the	Morocco	Turkmenistan
Congo	Netherlands	Ukraine
Denmark	Nigeria	United Arab Emirates
Estonia	Norway	Uzbekistan
Finland	Pakistan	Viet Nam
France	Philippines	
Georgia	Poland	
Germany	Portugal	
Greece		

States that are Parties to both the 1949 Protocol and 1968 Conventions on Road Signs and Signals are highlighted in bold. States that have only signed but not ratified the 1968 Convention on Road Signs and Signals, are Brazil, Costa Rica, Ecuador, Ghana, Holy See, Indonesia, Mexico, Republic of Korea, Spain, Thailand, United Kingdom of Great Britain and Northern Ireland, and Venezuela (Bolivarian Republic of).

3.2 Vehicle harmonization

Important in the context of road safety are also the UNECE agreements on vehicle construction standards, 30 namely:

- 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, of 1958. Entry into force 20 June 1959; Signatories: 4; Parties: 51 (7 developing countries) (see Table 6).
- Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections, of 13 November 1997. Entry into force 27 January 2001. Signatories: 23, Parties: 14 (0 developing countries) (see Table 7).
- 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, of 1998 (UN GTRs). Entry into force 25 August 2000. Signatories: 5; Parties: 36 (7 developing countries) (see Table 8).

The 1958 agreement provides the legal framework for adopting uniform United Nations Regulations (including on headlamps, braking, tires, safety belts), specifically related to safety and environmental aspects, for all types of wheeled vehicles manufactured. The United Nations Regulations contain provisions (for vehicles, their systems, parts and equipment) related to safety and environmental aspects. They include performance-oriented test requirements, as well as administrative procedures. The latter address the type approval (of vehicle systems, parts and equipment), the conformity of production (i.e. the means to prove the ability, for manufacturers, to produce a series of products that exactly match the type approval specifications) and the mutual recognition of the type approvals granted by Contracting Parties. With vehicles complying with the requirements of this agreement, safety and environmental performance are improved, facilitating international traffic and trade.

The 1997 Agreement provides the legal framework for the inspection of wheeled vehicles and for the mutual recognition of inspection certificates for cross-border use of road vehicles, in order to ensure that they are safe and environmentally friendly. Its rules do not currently cover passenger cars and vans, but amendments are underway. In addition, the 1998 Agreement, serves as the framework for developing the United Nations Global Technical Regulations (UN GTRs), to promote safety and environmentally friendly vehicles, including on electronic stability control, pole side impact, and emissions test. UN GTRs contain globally harmonized performance-related requirements and test procedures. They provide a predictable regulatory framework for the global automotive industry, consumers and their associations. They do not contain administrative provisions for type approvals and their mutual recognition

_

³⁰ For the texts of the agreements and regulations, see https://www.unece.org/trans/main/welcwp29.html

The above agreements are administered by the UNECE Global Forum on Vehicle Regulations (WP.29), and all major companies in the automotive industry are also involved, together with governments. In addition, resolutions are regularly adopted by the Inland Transport Committee, clarifying the provisions of these agreements in order to facilitate their implementation.

Table 6. Parties to the Agreement on Harmonized Technical UN Regulations, of 1958 as at 30 November 2017

51 Parties to the Agreement on Harmonized Technical UN Regulations, of 1958		
Albania	Greece	Russian Federation
Australia	Hungary	San Marino
Austria	Italy	Serbia
Azerbaijan	Japan	Slovakia
Belarus	Kazakhstan	Slovenia
Belgium	Latvia	South Africa
Bosnia and Herzegovina	Lithuania	Spain
Bulgaria	Luxembourg	Sweden
Croatia	Malaysia	Switzerland
Czech Republic	Montenegro	Thailand
Denmark	Netherlands	The former Yugoslav Republic of
Egypt	New Zealand	Macedonia
Estonia	Norway	Tunisia
European Union	Poland	Turkey
Finland	Portugal	Ukraine
France	Republic of Korea	United Kingdom of Great Britain
Georgia	Republic of Moldova	and Northern Ireland
Germany	Romania	
Note: Names of developing countries appear in italics. For the European Union, approvals are granted by its		

Note: Names of developing countries appear in italics. For the European Union, approvals are granted by its Member States using their respective ECE symbol.

Table 7. Parties to the Agreement on Periodical Technical Inspections of Vehicles in Use, 1997, as at 30 November 2017

14 Parties to the Agreement on Periodical Technical Inspections of Vehicles in Use, 1997		
Albania	Georgia	Romania
Belarus	Hungary	Russian Federation
Bulgaria	Kazakhstan	San Marino
Estonia	Netherlands	Ukraine
Finland	Republic of Moldova	

Table 8. Parties to the Agreement on Global Technical Regulations on Vehicles, 1998, as at 15 November 2017

36 Parties to the Agreement on Global Technical Regulations on Vehicles, 1998		
Australia	Japan	Slovakia
Azerbaijan	Kazakhstan	Slovenia
Belarus	Lithuania	South Africa
Canada	Luxembourg	Spain
China	Malaysia	Sweden
Cyprus	Netherlands	Tajikistan
European Union	New Zealand	Tunisia
Finland	Norway	Turkey

France	Republic of Korea	United Kingdom of Great Britain
Germany	Republic of Moldova	and Northern Ireland
Hungary	Romania	United States of America
India	Russian Federation	
Italy	San Marino	
Note: Names of developing countries appear in italics.		

3.3 Transport of dangerous goods

Another relevant UN instrument for road safety, managed by the Working Party on the Transport of Dangerous Goods (WP.15) at UNECE is:

- European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR), adopted on 30 September 1957 - Entry into force 29 January 1968. Signatories: 9; Parties: 49 (3 developing countries)³¹ (see Table 9). The 1975 Protocol amending the Agreement, entered into force on 19 April 1985.

According to this agreement, apart from some excessively dangerous goods, other dangerous goods may be carried internationally in road vehicles, subject to compliance with the conditions laid down in: Annex A for the goods in question, in particular as regards their packaging and labelling; and in Annex B, in particular as regards the construction, equipment and operation of the vehicle carrying the goods in question. The Convention also sets requirements for driver training. All these, help achieve safer road transport operations. The two Annexes have been regularly amended and updated since the entry into force of ADR. Worth noting is that the latest amendments which entered into force on 1 January 2017, allow accession by all United Nations Member States, making ADR a global Convention.

Table 9. States Parties to the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR), 1957, as at 30 November 2017

49 Parties to the European Agreement Concerning the International Carriage of			
Dangerous Goods by Road (ADR), 1957			
Albania	Hungary	Russian Federation	
Andorra	Iceland	Serbia	
Austria	Ireland	Slovakia	
Azerbaijan	Italy	Slovenia	
Belarus	Kazakhstan	Spain	
Belgium	Latvia	Sweden	
Bosnia and Herzegovina	Liechtenstein	Switzerland	
Bulgaria	Lithuania	Tajikistan	
Croatia	Luxembourg	The former Yugoslav Republic of	
Cyprus	Malta	Macedonia	
Czech Republic	Montenegro	Tunisia	
Denmark	Morocco	Turkey	
Estonia	Netherlands	Ukraine	
Finland	Norway		

³¹ Morocco, Tunisia and Turkey.

-

France	Poland	United Kingdom of Great Britain
Georgia	Portugal	and Northern Ireland
Germany	Romania	
Greece	Republic of Moldova	
Note: Names of developing countries appear in italics.		

3.4 Road transport infrastructure

In addition, road safety elements or perspectives are present in several other UNECE instruments such as in infrastructure agreements and projects, including:

- European Agreement on Main International Traffic Arteries, 1975 (AGR)
 Parties 37 (1 developing country), 32
- Trans-European Motorways (TEM) Project, and
- Trans-European Railway (TER) Project.

However, these instruments have not been included in this analysis on global legal instruments, due to the fact that infrastructure agreements and projects are geographically restricted at the moment.³³

3.5 Other instruments

- European Agreement Concerning the Work of Crews of Vehicles Engaged in International Road Transport (AETR), adopted on 1 July 1970 – Entry into force 5 January 1976. Signatories: 13, Parties: 51 (1 developing country). 34

This agreement regulates working conditions, including driving and rest times for professional drivers. Although relevant for road safety, this instrument has been open for accession only to UNECE Member States.³⁵

It is also worth noting that according to UNECE (2017a), as regards accession to the six core United Nations road safety agreements - including those on Road Traffic 1968; Road Signs and Signals, 1968; Dangerous Goods by Road (ADR), 1957; Vehicle Regulations, 1998; Technical Inspection of Vehicles, 1997; and Global Vehicles Regulations, 1998³⁶ - 49 per cent of countries are Parties to at least one, while 51 per cent are not Parties to any of them. Countries that are not parties to any of the core United Nations road safety agreements include, 22 per cent of countries (11) in Asia, 76 per cent of countries (42) in Africa, 79 per cent of countries (26) in the Americas, and 53 per cent of countries (18) in the Pacific. These are equivalent to almost 24 per cent of the world's population (approx. 1.7 billion people). As regards UNECE Member States, all of them have acceded to at least one road safety related convention, while 7 of them are Parties to all core road safety conventions.

33 For more information, and similar regional instruments applicable in other parts of the world, see part 4 below on road safety infrastructure issues.

³² Turkey.

³⁴ Turkey

³⁵ For more information, see http://www.unece.org/trans/conventn/legalinst.html#infrastructure

³⁶ Two core UNECE road safety conventions, namely AETR, 1970, and AGR, 1975, were excluded from the analysis because of their regional nature.

4. Road safety and the 2030 Agenda, particularly in the context of infrastructure planning

As already mentioned, sustainable transport is essential to achieving most of the goals in the 2030 Agenda for Sustainable Development. The Global Sustainable Transport Conference held on 27-28 November 2016 in Ashgabat, Turkmenistan, considered the large number of annual deaths from road traffic accidents, as one of the main challenges caused by unsustainable transport. Quality of infrastructure has been identified as one of the main factors contributing to road safety. Among relevant goals and targets in the 2030 Agenda for Sustainable Development, goal 9, on building climate-resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation, is particularly relevant in the context of transport infrastructure.

Despite its great importance, building and maintaining transport infrastructure is costly, and many developing countries need assistance. To help address these needs, among others, the Addis Ababa Action Agenda (AAAA), ³⁷ was adopted in 2015, along with the 2030 Agenda for Sustainable Development. AAAA consists of a new global framework for financing sustainable development, and is particularly relevant for transport infrastructure, including sustainable and climate-resilient road transport infrastructure. In the AAAA, States reiterated their goal to end poverty and hunger and to achieve sustainable development in its three dimensions through promoting inclusive economic growth, protecting the environment and promoting social inclusion.

Box 2: Relevant paragraphs of the AAAA

As regards infrastructure, States in the AAAA, among others:

- committed to "increasing public investment, which plays a strategic role in financing research, infrastructure and pro-poor initiatives" (para.7);
- recognized that "investing in sustainable and resilient infrastructure, including transport, energy, water and sanitation for all, is a pre-requisite for achieving many of our goals. To bridge the global infrastructure gap, including the USD1 trillion to USD1.5 trillion annual gap in developing countries, we will facilitate development of sustainable, accessible and resilient quality infrastructure in developing countries through enhanced financial and technical support" (para 14);
- welcomed the launch of new infrastructure initiatives aimed at bridging these gaps, including the Asian Infrastructure Investment Bank, the Global Infrastructure Hub, the New Development Bank, the Asia Pacific Project Preparation Facility, the World Bank Group's Global Infrastructure Facility and the Africa 50 Infrastructure Fund, as well as the increase in the capital of the InterAmerican Investment Corporation" (para 14);
- as a key pillar to meet the sustainable development goals, called for "the establishment of a global infrastructure forum building on existing multilateral collaboration mechanisms, led by the multilateral development banks, United Nations agencies, and national institutions, development partners and the private sector. It will encourage a greater range of voices to be heard, particularly from developing countries,

³⁷ Addis Ababa Action Agenda of the Third International Conference on Financing for Development. Available at http://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA Outcome.pdf

to identify and address infrastructure and capacity gaps, in particular in LDCs, LLDCs, SIDS and African Countries" (para 14);

- noted "the role that well-functioning national and regional development banks can play in financing sustainable development, particularly in credit market segments in which commercial banks are not fully engaged and where large financing gaps exist, based on sound lending frameworks and compliance with appropriate social and environmental safeguards. This includes areas such as sustainable infrastructure, energy, agriculture, industrialization, science, technology and innovation, as well as financial inclusion and financing of micro, small and medium-sized enterprises (para.33);
- expressed their commitment to "support cities and local authorities of developing countries, particularly LDC and SIDS, in implementing resilient and environmentally sound infrastructure, including energy, transport, water and sanitation and sustainable and resilient buildings using local materials" (para.34);
- acknowledged that "impediments to private investments in infrastructure exist on both the supply and demand side. Insufficient investment is due to inadequate infrastructure plans and an insufficient number of well-prepared investable projects, along with private sector inventive structures that are not necessarily appropriate for investing in many long-term projects, and risk perceptions of investors. To address these constraints, we will imbed resilient and quality infrastructure investment plans in our national sustainable development strategies, while also strengthening our domestic enabling environments. Internationally, we will provide technical support for countries to translate plans into concrete project pipelines, as well as for individual implementable projects, including for feasibility studies, negotiation of complex contracts, and project management" (para. 47);
- recognized that "both public and private financing have key roles to play in infrastructure financing, including through development banks, development finance institutions and tools and mechanisms such as public-private partnerships, blended finance, which combines concessional private finance and expertise from the public and private sector, special purpose vehicles, non-recourse project financing, risk mitigation instruments and pooled funding structures" (para.48);
- recognized that "an important use of international public finance, including ODA, is to catalyse additional resource mobilization from other sources, public and private...It can also be used to unlock additional finance through blended or pooled financing and risk mitigation, notably for infrastructure and other investments that support private sector developments" (para.54);
- recognized that "development banks can play a particularly important role in alleviating constraints on financing development, including quality infrastructure investment, including for sub-sovereign loans" (para.75);
- encouraged multilateral development banks, including regional banks, in collaboration with other stakeholders, to address gaps in trade, transport and transit-related regional infrastructure, including completing the missing links connecting LLDCs, LDCs and SIDS within regional networks" (para.87).

With respect to infrastructure, the United Nations Secretary General's Special Envoy for Road Safety in a recent report (UNECE, 2016), observed that it had been estimated that 50 per cent of casualties occur on around 10 per cent of the road network. Therefore, international efforts might be "reinforced to ensure greater road safety for all road users through proper planning, design, building and maintenance of high safety performance standards of road networks."

In the Global Plan for the Decade of Action for Road Safety 2011-2020, Pillar 2 focuses on raising the safety and protective quality of road networks for the benefits of all road users. This is intended to be achieved through the implementation of various road infrastructure agreements under the United Nations framework, road infrastructure assessment and improved safety-conscious planning, design, construction and operation of roads (WHO, 2011). In this regard, six activities are listed under Pillar 2, which include promoting safe operation, maintenance and improvement of existing road infrastructure by road authorities and developing safe new infrastructure that meets the mobility and access needs of all users, encouraging capacity building and knowledge transfer by creating partnerships, including with development banks, national authorities, civil society, education providers and the private sector, as well as encouraging research and development in safer roads and mobility.

Regional Action Programmes and Plans have also been adopted along with the Global Plan, listing priority areas and concrete road safety measures, the implementing process and the organizations and other stakeholders involved. One example would be the European Road Safety Program 2011-2020 (European Commission, 2010), having as its main target to halve the overall number of road deaths in the European Union by 2020, where safer road infrastructure was listed as one of its seven strategy objectives. In addition, national road safety strategies have been formulated, setting clear and concrete targets for road safety policies, and establishing action plans containing selected concrete measures that can be transformed into actions, considering the specific situation in the country and best practices from other countries. To ensure progress, the development and implementation of these measures is continuously monitored and their effects on road safety evaluated.

As it has been recently indicated by UNESCAP (2017)³⁸, "studies show a strong correlation between infrastructure design and road safety and road engineering and design can influence the severity of the crashes. The design standards chosen for the construction of new roads should ensure that they meet the highest existing safety standards available in the field. In many countries, the installation of barriers to separate opposing directions of traffic and/or different types of vehicles, the application of access control principles, better geometric design of roads to increase the sight distance in curves and the improvement of road shoulders, are examples of infrastructure-related measures that have contributed to a reduction in road accidents and fatalities wherever they have been applied. International experiences show that interventions in terms of road infrastructure to improve the driving environment can pay for themselves and the related financial investment can be recovered within a reasonable period of time."

-

³⁸ Quoting Ahmed I (2013).

Box 3: Extract from one national road safety strategy and action plan

The national Road Safety Strategy and Action Plan of Kosovo (EU Office in Kosovo, 2015) for instance, identifies the following for addressing infrastructure issues:

"The design and condition of roads have a key influence on road safety. Therefore road, road sections and road elements (as junction, pedestrian crossings etc.) should be assessed under the point of view of road safety. New roads should be audited at the construction planning stage and existing roads should be inspected regularly. Sections and locations with high accident rates should be identified and remedial measures should be taken.

Over-speeding is the most frequent reason for an accident and responsible for severity of injuries. The road transport safety law defines speed limits according to the upper European level but the speeds effectively driven are frequently much higher when road and traffic conditions allow. Whenever speed reduction is necessary (junctions, main roads through villages, pedestrian crossings etc.), efficient structural measures must be taken.

On expressways and dual carriageways median restraint systems must prevent efficiently the crossover of cars and lorries to the opposite direction. Lateral restraint systems must protect running of vehicles from collision with obstacles like bridge-pillars, walls, lamp posts etc. Special attention should be given to hazards with tree and animal accidents.

Old, worn-out pavements with potholes are unwelcome in terms of traffic flow, but generally good for road safety because of the low possible speed. New pavement frequently mislead to over-speeding. Good roads with high traffic frequency should be inspected with regard to surface grip under wet weather condition. Sections with high percentage of slow running heavy vehicles should be inspected with regard to rutting and to prevent aquaplaning."

In this context, it is worth noting that the 1968 Convention on Road Signs and Signals³⁹ is relevant given that road signs, signals, symbols and road markings are themselves crucial to road safety, and are also integral components of many road safety infrastructure facilities. The 1968 Convention is being implemented both in countries that are Parties to it, and in some that are not. While it might not be sufficient by itself to serve as a design standard or guideline, it is up to individual countries and organizations to develop design standards and guidelines on the basis of the Convention.

In addition, many infrastructure agreements have been concluded at the regional level. These include for instance, the European Agreement on Main International Traffic Arteries, 1975 (AGR), ⁴⁰ and the Intergovernmental Agreement on the Asian Highway Network, 2003 (AH Agreement). ⁴¹ AGR provides UNECE Governments with the international legal framework for the construction and development of a coherent international road network with a view to the development of international road transport and traffic throughout the UNECE region. The AGR defines the E road network, consisting of the arteries for major international road traffic flows in Europe, and the infrastructure parameters to which those arteries should conform. The AGR is constantly kept under review and updated whenever

³⁹ See also information in part 3 of this report.

⁴⁰ Which entered into force on 15 March 1983, and as of 30 November 2017 had 37 States Parties.

⁴¹ Which entered into force on 4 July 2005, and as of 30 November 2017 had 30 States Parties. For the latest status and text of the agreements, see the United Nations Treaty Collection website, Chapter XI (B). Available at https://treaties.un.org/Pages/Treaties.aspx?id=11&subid=B&lang=en&clang=en

necessary to adapt it to new political and transport developments, such as the need for new roads in States or those created by new traffic flows.

The AH Agreement - the first treaty to have been developed under the auspices of the UNESCAP secretariat and deposited with the Secretary-General of the United Nations - provides a framework for coordinated development of the international highways in Asia, as well as between Asia and Europe, providing a platform for Member States to discuss technical and institutional issues to improve the quality of the network and increase the efficiency of its operation. In addition, under the Regional Action Programme for Transport Development in Asia and the Pacific, the Asian Highway Network could benefit among others, from the establishment of road safety facility infrastructure standards, including harmonization of road construction standards and installations linked to road safety, such as acceleration and deceleration lanes, warning signs, regulatory signs, speed reduction devices, roadside safety features, etc.; development of model intelligent transport systems deployments, including use of new technologies for improving infrastructure and traffic management, and operation of transport systems; as well as sharing knowledge and know-how among stakeholders, including Member States, road operators, international organizations, through meetings and workshops.

However, regional agreements cover certain aspects of road safety infrastructure, which sometimes might not be sufficient. For instance, UNESCAP (2017)⁴² found that the Asian Highway "classification" and design standards as stipulated" in annex II to the Intergovernmental Agreement on the Asian Highway network does not provide adequate guidance on the road infrastructure safety facilities that might be considered in addressing road safety on the Asian Highway routes. The study also found that in relation to road safety generally, for instance, the Asian Highway Standard included one very general reference, stating that: "While developing the Asian Highway network, Parties shall give full consideration to issues of safety" (Article 10 of Section II, Annex II). The responses to a survey, received from 17 Asian Highway member countries indicated that 36 road infrastructure facilities were used in at least one member country, while just 10 of the countries used more than half of the 36 road infrastructure safety facilities. A number of reasons that particular road infrastructure safety facilities were not used, included lack of planning and/or design (23 per cent), lack of budget (12 per cent), lack of cost effectiveness (7 per cent) and other reasons (33 per cent). These results suggested the need for case studies to support the use of each road infrastructure safety facility and for training on their use, as potentially helpful for removing perceived barriers to their uses. In this context, UNESCAP (2017) (pg. 105-106) made the following recommendations:

- "(i) The Asian Highway members countries are recommended to consider road safety as a priority in planning, designing, constructing, maintaining and managing the Asian Highway routes. As road infrastructure safety facilities can play a vital role in improving road safety, it is strongly recommended to adopt and practice technical design standards of road infrastructure safety facilities.
- (ii) The study recommends for providing guidance to the Asian highway member countries through a dedicated new annex to the Intergovernmental Agreement on the Asian Highway

33

⁴² The report was issued after a study conducted by UNESCAP secretariat during 2015-2017 on the development of technical standards on road infrastructure safety facilities for the Asian Highway Network, as part of an initiative to achieve inclusive and sustainable development through regional cooperation and integration in transport in the Asia-Pacific region and an activity towards implementation of the Regional Action Programme for Sustainable Transport Connectivity in Asia and the Pacific, phase I (2017-2021).

Network. The draft new Annex IV could be considered by the Asian Highway member countries towards adoption as minimum technical standards of road infrastructure safety facilities for the Asian Highway Network. The detailed design guidelines included at the end of this report is recommended to be used as a reference document for the Asian Highway Network."

To supplement regional agreements, other regional instruments may be adopted. For instance, the European Commission's directive on improving the safety of the European road network (European Parliament and European Council, 2008) was adopted in 2008, aiming to achieve common quality management in infrastructure safety in Europe. The directive currently only applies to the Trans-European road network (TEN), comprising only the highest-ranking roads, mostly motorways and expressways which already have high road safety levels. However, the EC encourages all Member States to also apply the directive to all other roads under their responsibility. The procedures covered by the directive, which are considered as essential to achieve positive road safety effects include:

- Road Safety Impact Assessment (RSIA) to introduce the factor road safety into the impact assessment procedures for bigger road projects at a very early planning stage
- Road Safety Audits (RSA) for new road at the construction planning stage
- Road Safety Inspection (RSI) for existing roads
- Network Safety Management (NSM) and Black Spot Management (BSM) to identify and remedy dangerous sections and locations
- Education, training and certification of Road Safety Auditors.

In a wider infrastructure context, and the role it plays in growth, competitiveness, job creation, and poverty alleviation, worth noting is also the establishment by the Multilateral Development Banks (MDBs)⁴³ in April 2016, as mandated by the AAAA (para 14), of the Global Infrastructure Forum to help bridge the infrastructure gap, as key for achieving the sustainable development goals. The Forum aims to improve coordination among the stakeholders, for established and new infrastructure initiatives, while respecting the diversity of approaches, policies, and procedures among them, to facilitate the development of sustainable, accessible, and resilient infrastructure for developing countries. The Forum will be held annually, with responsibility for hosting rotating among the MDBs. It will encourage a greater range of voices to be heard, particularly from developing countries, to identify and address infrastructure and capacity gaps, in particular in LDCs, LLDCs, SIDS and African Countries.

Addressing the infrastructure gap requires a boost in investment, both private and public, as well as better governance, capacities, and improving efficiency to get more from existing spending on infrastructure. MDBs have a recognized experience of collaboration in the direct financing of projects and mobilizing private capital, as well as improving capacities and knowledge about infrastructure. Some examples include the Global Infrastructure Facility, the International Infrastructure Support System, the PPP Knowledge Lab, Infrascope, and the PPP Certification program. To achieve the objectives of the Forum, the MDBs and development partners resolved to work together on

34

⁴³ Including the African Development Bank, Asian Development Bank, Development Bank of Latin America, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank, Islamic Development Bank and the World Bank.

strengthening project preparation, promoting financing, building on shared principles and promoting compatible and efficient approaches, as well as improving data and information.⁴⁴

4.1 Relevant MDB activities in developing countries

According to a recent progress report covering 2015-2016 (ADB et al., 2017, para 53), MDBs approved 89 new road projects in total, to construct and upgrade 36,923 km of roads, mainly for non-urban roads including regional, national, provincial and rural. Most road projects approved in 2015 incorporated activities to mainstream sustainability by incorporating road safety, road asset management, climate resilience and gender aspects. For instance, in 2015: African Development Bank approved 11 road projects with road safety indicators; Asian Development Bank approved 15 road projects with road safety indicators; Development Bank of Latin America has included road safety as the main pillar in its urban mobility and roads strategies in order to incorporate safety for all road users, including vulnerable road users, in all its operations; European Bank for Reconstruction and Development (EBRD), included road safety components in all its seven projects in the road sector; Inter-American Development Bank, approved 8 loans, 4 of which have road safety indicators; Islamic Development Bank included road safety components in all its road projects; and 100 per cent of the World Bank road projects included road safety components (ADB et al., 2017, paras 62, 74, 82, 92, 105, 112, 121). It is also World Bank policy that all transport projects be enhanced with certain sustainability dimensions, in accordance with its strategic and operational targets. These include Climate Benefits, Greenhouse Gas Emissions, and Road Safety considerations. Road safety dimension implies that all roads projects are screened for road safety during the preparation and design phase, and dedicated safety components are included if possible.

In addition to financing investments in road safety, activities by MDBs have included support for road safety awareness events and training in developing countries, aimed at improving understanding on road safety problems and approaches. For instance, African Development Bank made use of its road safety audit manuals and road safety toolkit in its road operations for use by national road agencies; Asian Development Bank approved a road safety demonstration project in Shaanxi province in the PRC to develop and institutionalize modern road safety design and management approaches to reduce road deaths and injuries in mountainous areas; Development Bank of Latin America included road safety audits in all of its road operations, and continued its work to foster awareness through training and capacity building, strengthening its work on motorcycles, and engaging a wider set of stakeholders in developing a comprehensive guide for traffic crash victims. Il also formulated a road safety training course and a proposal on how road safety auditors can be certified in countries to reduce a shortage; European Investment Bank supported rehabilitating 116 km of roads connecting Honduras, Guatemala and El Salvador, following standards of the European Commission's Road Safety Directive, which in addition to savings, is expected to reduce the number of road fatalities; Islamic Development Bank included road safety audit in 93 per cent of its road projects (ADB et al., 2017, paras. 58, 62, 75, 81, 82, 100, 112).

⁴⁴ For more information, see Chairman's Statement--Global Infrastructure Forum 2016. Available at http://www.worldbank.org/en/topic/publicprivatepartnerships/brief/chairmans-statement-global-infrastructure-forum-2016. For information on latest progress reported at the GIF 2017, see https://pppknowledgelab.org/2017giforum.

5. The role of selected United Nations agencies and other bodies in road safety

5.1 United Nations Conference on Trade and Development (UNCTAD)

Many international agencies and other bodies have been undertaking a wide range of activities and initiatives in the field of road safety. UNCTAD could contribute to these efforts as well, particularly pursuant to its renewed mandate, in accordance with the Nairobi Maafikiano,⁴⁵ to continue its work in the field of transport and its contribution to the effective implementation of international agreements and outcomes that recognize the role of transport infrastructure in the implementation of the 2030 Agenda. These include the relevant outcomes of the AAAA.

As part of its work on transport and trade logistics, UNCTAD undertakes research and analytical work, consensus building activities and technical assistance, including advice and assistance on a wide range of legal and policy issues related to sustainable transport.⁴⁶ Recognizing the multiple dimensions of freight transport, relevant work aims to help developing countries achieve greater sustainability and resilience in their freight transport sector, with a view to supporting the overall sustainable development prospects of developing countries. Worth mentioning is UNCTAD work on sustainable freight transport and finance, which also includes safety aspects.⁴⁷ Also a number of analytical studies and reports have been prepared, on the economic, social and environmental dimensions of sustainable transport, including among others the nexus between oil prices and maritime freight rates (UNCTAD, 2010), liability and compensation for ship-source oil pollution under the International Oil Pollution Compensation (IOPC) Fund regime (UNCTAD, 2012), as well as maritime piracy (UNCTAD, 2014a and 2014b). 48 In addition, since 2008, UNCTAD considers climate change as part of its ongoing work in the field of trade logistics and carries out substantive work to help improve the understanding of issues at the interface of maritime transport and the climate change challenge (see for instance, UNCTAD (2009), UNECE (2010), and UNCTAD (2011)). Special emphasis is placed on climate change impacts and adaptation for seaports and related key coastal transport infrastructure, in particular for ports and airports in SIDS and LDCs, and the need to enhance their climate-resilience. 49

UNCTAD work on sustainable and resilient freight transport is closely aligned with several targets under the 2030 Agenda, in particular those on road safety (3.6), pollution reduction (3.9), energy efficiency (7.3), sustainable and resilient infrastructure (9.1, 9a), mobilizing resources and finance (10.b and 17.3), access to sustainable transport (11.2), sustainable cities (11.6), climate change (13.1, 13.2 and 13.3), marine pollution reduction, marine ecosystems and the sustainable use of oceans

46 For more information on UNCTAD work in the field of transport, see http://unctad.org/en/Pages/DTL/Trade-Logistics-Branch.aspx

⁴⁵ See footnote 1 above.

⁴⁷ For more information, see http://unctad.org/en/Pages/DTL/TTL/Legal/Legal/Documents.aspx
48 For a complete list and texts of UNCTAD analytical studies and reports on transport law and policy, see http://unctad.org/en/Pages/DTL/TTL/Legal/Legal/Documents.aspx

⁴⁹ For further information and full documentation, see the UNCTAD website at http://unctad.org/en/Pages/DTL/TTL/Legal/Climate-Change-and-Maritime-Transport.aspx. For work on an ongoing UNCTAD UNDA project on Climate Change Impacts and Adaptation for Coastal Transport Infrastructure in the Caribbean, see http://unctad.org/en/Pages/DTL/TTL/Legal/Climate-Change-Impacts-on-SIDS.aspx

(14.1, 14.2, 14.7 and 14c), poverty reduction (1.5) and trade (17.10–17.12), as well as with enabling factors such as technology, data capabilities, finance and policy coherence.

5.2 World Health Organization (WHO)

WHO, is the United Nations' lead agency for road safety.⁵⁰ It chairs the UNRSC, and publishes its biannual Global Status Report on Road Safety, containing road safety country level data, and providing information on compliance with policy and legislative issues. The WHO's latest (third) report in the series, the Global Status Report on Road Safety 2015, provided an overview of the road safety situation globally, highlighting the gaps and the measures needed to best drive progress. The report indicated that while there had been progress towards improving road safety legislation and in making vehicles safer, the pace of change was too slow. Urgent action was needed to achieve the ambitious road safety target of halving the global number of deaths and injuries from road traffic crashes by 2020, as reflected in target 3.6 of the 2030 Agenda for Sustainable Development.

WHO organizes bi-annual United Nations Global Road Safety Weeks, the latest of which was held in May 2017 focusing on speed as a key risk factor for road traffic deaths and injuries, contributing to one in three road traffic fatalities, and what can be done to address this. WHO also hosted the 24th meeting of the UNRSC in March 2017, which discussed among others about the implementation of the United Nations General Assembly and WHO Assembly resolutions, various activities needed to meet the road safety related sustainable development goals, updating the UNRSC terms of reference, current and future activities of the UNRSC project groups, and reviewing membership requests and provide updates on UNRSC partner activities (WHO, 2017b).

In addition, in 2017, WHO launched "Save LIVES: a road safety technical package" (WHO, 2017c), which outlines key evidence-based measures and interventions, identified by many of the world's leading road safety experts and agencies, as those most likely to impact road traffic deaths and injuries in the short and long term. Those relate to Speed management, Leadership, Infrastructure design and improvement, Vehicle safety standards, Enforcement of traffic laws and post-crash Survival.

5.3 United Nations Economic Commission for Europe (UNECE)

UNECE is responsible for some key international legal instruments in the field of road safety. ⁵¹ These include international conventions and protocols on road traffic and road signs and signals, agreements on vehicle regulations, as well as other related instruments. States Parties to these legal instruments discuss and amend these, in various UNECE bodies, which include: the Global Forum for Road Traffic Safety (WP.1)⁵² - monitoring the road traffic conventions and promoting best practices through issuing policy recommendations; ⁵³ and the World Forum for Harmonization of Vehicle Regulations (WP.29)⁵⁴ - responsible for international vehicle standards, and incorporating into regulatory framework the

⁵⁰ See http://www.who.int/roadsafety/en/

⁵¹ See part 3 of this report. Also see http://www.unece.org/trans/welcome.html

⁵² Changed its name in 2017. Formerly known as the Working Party on Road Traffic Safety (WP.1), an intergovernmental body established in 1988, under the UNECE Inland Transport Committee.

⁵³ For best practices, see the latest versions of Consolidated Resolution on Road Traffic (R.E.1), and Consolidated Resolution on Road Signs and Signals (R.E.2), available at http://www.unece.org/trans/roadsafe/rsrec.html

⁵⁴ For more information, see http://www.unece.org/trans/main/welcwp29.html

technological innovations of vehicles to make them safer and more environmentally sound. Also, worth noting is recent work in these forums, on driverless vehicles and related concerns and opportunities. In addition, relevant for road safety is work carried out through the Working Party on the Transport of Dangerous Goods (WP.15).⁵⁵

UNECE activities on road safety range from regulatory, analytical, capacity building and policy dialogue, and take place at the global, regional, and national levels. In 2012, the Inland Transport Committee adopted the UNECE Plan (UNECE, 2011), which is directly aligned to the implementation of the UN Decade's Action Plan, and aims to achieve the UNECE's overall road safety goals by addressing priority areas of work with the Global Forum on Road Traffic Safety (WP.1) being the main coordinating entity in the field of road safety.

UNECE also acts as the secretariat for the United Nations Secretary General's Special Envoy for Road Safety, who is promoting wider implementation of the United Nations legal instruments and the establishment of a United Nations Road Safety Fund. ⁵⁶ A proposal for the Fund was developed and launched in November 2016, during the Global Sustainable Transport Conference in Ashgabat. Consultations have taken place since with various stakeholders and Member States including at the 79th session of the UNECE Inland Transport Committee, held in February 2017 (UNECE, 2017b).

5.4 United Nations Economic Commission for Africa (UNECA)

UNECA,⁵⁷ established in 1958, has played an important role in the development of transport in Africa, including in the efforts to improve safety of Africa's roads. Among others, it has organized several high-level road safety events, bringing together various stakeholders to brainstorm on road safety challenges and opportunities. In the context of the UN Global Decade of Action for Road Safety (2011-2020), it helped with the preparation of the African Road Safety Action Plan for 2011-2020, and later, with monitoring and evaluating its implementation. More recently, UNECA and the African Union Commission prepared the draft African Road Safety Charter (African Union, 2016).

5.5 United Nations Economic Commission for Latin America and the Caribbean (UNECLAC)

UNECLAC,⁵⁸ established in 1948, has a long experience of transport related work in the region, which has ranged from assessing the economic infrastructure and trends in public and private infrastructure spending, to analyzing logistics and mobility services and their regulatory framework. Work on transport regulations has focused on issues of transport financing, access to domestic and regional markets, and the quality of national and regional policies on transport, infrastructure and logistics. UNECLAC is active in the region with capacity-building, technical assistance, and providing statistical data.

⁵⁵ For more information, see https://www.unece.org/trans/danger/danger.html

⁵⁶ In accordance with United Nations (2016). For more information, see <a href="http://www.unece.org/un-sgs-special-envoy-for-road-safety/un-sgs-special-envoy-

⁵⁷ www.uneca.org

⁵⁸ www.cepal.org/en

5.6 United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

UNESCAP, ⁵⁹ established in 1947, aims to promote inclusive and sustainable economic and social development in the Asia-Pacific region by intergovernmental processes, norm setting, regional research and analysis, capacity building and development of partnerships. Its work covers transport policy, infrastructure, facilitation and logistics, and aims to build regional integrated intermodal transport and logistic systems. Among others, it promotes regional standards and guidelines for infrastructure and road safety, integrated transport planning, establishing regional frameworks, strengthening national and local capacities, sharing of knowledge on sustainable transport solutions, including safer transport systems and promotion of public transport, non-motorized vehicles and the creation of pedestrian spaces in urban environments. The Intergovernmental Agreement on the Asian Highway Network, for instance, is one of the relevant regional legal instruments on road safety adopted at UNESCAP in 2003.⁶⁰

5.7 United Nations Economic and Social Commission for Western Asia (UNESCWA)

UNESCWA, ⁶¹ established in 1973 to strengthen economic cooperation and promote development efforts in the region, serves as a forum for governments and transport specialists, to meet and share experiences, and provides useful statistical information on national infrastructure. One relevant regional legal instrument on road safety adopted at UNESWA in 2001, is the Agreement on International Roads between Arab Countries. ⁶²

5.8 Multilateral Development Banks (MDBs)

Major MDBs have made important investments in road infrastructure and safety, particularly in low and middle-income countries.⁶³ In 2011, MDBs announced a joint initiative to improve road safety and reduce rising road deaths and injuries in developing countries, aiming to meet the targets of the United Nations Decade for Road Safety 2011-2020. They have, collectively and individually, increased loan and grant financing for road safety investments, and technical assistance for strengthening road safety capacity, policies and institutions in client countries as well as awareness events.

In 2014, MDBs jointly issued the Road Safety Guidelines (ADB et al., 2014), which aim to establish a common approach on road safety, specifically for road and transport projects funded by multilateral development banks, as well as traffic generating non-transport projects. This approach considered the fact that these banks have a strong relation with road transportation and infrastructure agencies due to the projects that they finance. Therefore, the guidelines take advantage of this situation with the aim to enhance road safety in the countries where these banks work. This could be done among others, through conducting road safety screening early in the appraisal of projects, as it is done for social and environmental issues, as well as through safe road infrastructure design and engineering.

⁵⁹ www.unescap.org

⁶⁰ See footnote 41 above.

⁶¹ https://www.unescwa.org/

⁶² The agreement entered into force on 19 October 2003, and as of 15 November 2017 had 13 States Parties.

⁶³ Collectively, the MDBs provided in 2015 about \$23 billion in new funding for sustainable transport projects, including road projects with road safety components, adding to the \$20 billion approved in 2014, \$25 billion approved in 2013, and \$20 billion approved in 2012 (ADB et al., 2017).

Since 2014, the MDB Road Safety Initiative has been placed under the guidance of the MDB Working Group on Road Safety, which in 2015 published a report (ADB et al., 2015) that was presented during the Ministerial Meeting in Brazil at a side-event on the Global Plan Pillar 2: Safer Roads and Mobility, called Safer Infrastructure for All Road Users. This event was attended by road infrastructure stakeholders including the World Road Association (PIARC), International Transport Forum (ITF), International Road Federation (IRF), and the MDBs. In January 2017, the Working Group also published a Progress Report 2015-2016 (ADB et al., 2017).⁶⁴

The main MDB, the World Bank, has been active in addressing the issue of road safety and jointly with WHO launched the World Report on Road Traffic Injury Prevention (WHO, 2004). In 2006, the Global Road Safety Facility⁶⁵, a global partnership program administered by the World Bank, was established, which now supports the Decade of Action and the associated United Nations Global Plan of Action to stabilize and reduce road traffic deaths and injuries by 2020. It aims to help reduce road traffic deaths and injuries in low- and middle-income countries, by offering comprehensive assistance around road safety management and delivery through funding support, technical expertise, and knowledge. The associated Strategic Plan for 2013-2020 (World Bank, 2012), details the goals of the Global Road Safety Facility, and related priority activities and outcome indicators for each of them. The three main goals are:

- Strengthened global, regional and country capacity to support sustainable reductions in road deaths and injuries in low and middle-income countries;
- Scaled-up global road safety funding, coordination and advocacy mechanisms; and
- Mainstreamed road safety components in all World Bank-funded road infrastructure projects.

In 2016, the World Bank Environmental and Social Framework (World Bank, 2016, pp.45-46) was adopted, which aims to ensure that "potential traffic and road safety risks to workers, affected communities and road users" will be evaluated and monitored, and "technically and financially feasible road safety measures" will be incorporated into the World Bank's projects, to prevent and mitigate potential road safety risks to road users and affected communities.

In 2014, World Bank road safety commitments in transport projects reached a record high of US\$411 million. As of 2015, those commitments stood at US\$239 million, representing 5.5 per cent of all road sector lending in that fiscal year. And, in 2015, for the first time ever, 100 per cent or World Bank road transport projects had a road safety component. Africa region, also for the first time ever, reached about US\$81 million in road safety commitments in 2015 as well.⁶⁶

5.9 International Transport Forum (ITF) at the OECD

ITF⁶⁷ at the OECD is an intergovernmental organization with 59 Member States, which acts as a think tank for transport policy. It organizes global dialogue for better transport, and acts as a platform for

⁶⁴ See also, Journal of the Australasian College of Road Safety (2016).

⁶⁵ See, http://www.worldbank.org/en/programs/global-road-safety-facility

⁶⁶ See http://www.worldbank.org/en/topic/transport/brief/road-safety-at-the-world-bank

⁶⁷ ITF is administratively integrated with the OECD, yet politically autonomous. It started as the European Conference of Ministers of Transport (ECMT), a regional organization, and following increased membership and wider mandate, changed

discussion and pre-negotiation of policy issues across all transport modes, including an Annual Summit of transport ministers in Leipzig Germany. ITF analyzes trends, shares knowledge and promotes exchange among transport decision-makers and civil society. In addition, it carries out research on best practices in road safety policy, and encourages a holistic strategy that promotes safe vehicles, roads and road users. Its mission is to foster a deeper understanding of the role of transport in economic growth, environmental sustainability and social inclusion and to raise the public profile of transport policy. ITF also hosts the International Road Traffic Accident Database (IRTAD) ⁶⁸ which contains validated, up-to-date crash, ⁶⁹ exposure data ⁷⁰ and other safety data ⁷¹ from 32 mainly high-income countries, ⁷² and it issues a Road Safety Annual Report. ⁷³

Worth noting are the "Towards Zero" (OECD/ITF, 2008) report, aimed at setting ambitious casualty reduction targets, and recommending that all countries regardless of their level of road safety performance move to a safe system, as well as the "Zero Road Deaths and Serious Injuries" (OECD/ITF, 2016) report, calling for a fundamental paradigm shift in the way the road safety problem is viewed, and in the strategies used to address it, which involves a move from traditional road safety policies and "blame the victim" approach, to an "integrated view in which road traffic becomes a Safe System, where serious outcomes from crashes are prevented in the first place." In a Safe System all the elements of the road transport system, including roads, vehicles and speed, interact in a way that does not lead to death or injury.

In addition, a Memorandum of Understanding was recently concluded between the ITF and the International Road Assessment Programme (iRAP),⁷⁴ on enhanced collaboration in promoting policies that support the achievement of transport-related SDGs, particularly focusing on the objectives of targets 3.6, 11.2 and goal 9; as well as an agreement among ITF, the Federation Internationale d'Automobile (FIA)⁷⁵ and the World Bank, to create a network of Regional Road Safety Observatories. Focusing on low- and middle-income countries, these observatories will bring together national officials in charge of road safety with a view to improving the collection of road safety data, benchmarking road safety performance and driving evidence-based policies that reduce road deaths

its name to ITF in 2006, thus evolving into the first and only transport organization with a global mandate across all modes of transport. For more information on its activities, see www.itf-oecd.org

⁶⁸ See https://www.itf-oecd.org/IRTAD

⁶⁹ Fatalities, injury crashes, hospitalized injuries by: road type (motorways, urban roads, rural roads); road user (pedestrians, cyclists, car occupants, PTWs, others); age; gender; seat position in the car.

⁷⁰ Vehicle-kilometers; modal split; vehicle fleet, by type of vehicles; population; driving licences.

⁷¹ Seatbelt and helmet wearing rates.

⁷² The countries contributing data are: Argentina, Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, the United States.

⁷³ Available at https://www.itf-oecd.org/node/19558

⁷⁴iRAP is a member of the United Nations Road Safety Collaboration. It is a registered charity dedicated to preventing road deaths worldwide, providing tools and training to help automobile associations, governments, funding agencies, research institutes and other NGOs in more than 70 countries make roads safe. Their activities include: inspecting high-risk roads and developing Star Ratings, Safer Roads Investment Plans and Risk Maps providing training, technology and support that will build and sustain national, regional and local capability tracking road safety performance so that funding agencies can assess the benefits of their investments. For more information see, http://www.irap.org

⁷⁵ FIA, an organization founded in 1904 to promote motor sport, now also promotes safe, sustainable and accessible mobility for all road users across the world. It is committed to global sustainability initiatives and also to found its own worldwide campaign "FIA Action for Road Safety" in support of the UN's Decade of Action for Road Safety, aiming to reduce fatalities on the roads by five million before 2020.

and injuries. The observatories will serve as platforms for knowledge sharing and the dissemination of best practices. They will facilitate collaboration across regions and create transparency necessary to establish a healthy competition among countries to improve road safety conditions. The three parties to this agreement, will act as coordinators and will offer institutional support to the establishment of Regional Road Safety Observatories, as well as offer them technical expertise, help them identify funding sources, and encourage coordination of activities among Observatories (OECD/ITF, 2017b).

5.10 The International Road Federation (IRF)

IRF⁷⁶ is a nongovernmental, not-for-profit organization with the mission to encourage and promote development and maintenance of better, safer and more sustainable roads and road networks. It aims to promote social and economic benefits that flow from well-planned and environmentally sound road transport networks, and helps put in place technological solutions and management practices that provide maximum economic and social returns from national road investments.

One of the focus areas of IRF's work is road safety. IRF's contributions under the Decade of Action include: work under the IRF Road Safety Group of Experts - a policy development and working group, advocating for safe and forgiving road development, maintenance and operation by raising awareness, providing policy guidance and the exchange of knowledge and best practices; networking and information sharing; technical assistance and guidance to policy-makers, practitioners, and the broader road infrastructure sector designed to address road fatalities and injuries and contribute to road safety efforts; and advocacy for the adoption and implementation of evidence-based policies designed to reduce road-related death and injury.

5.11 The International Road Union (IRU) Commission for Global Road Safety (CSR)

IRU⁷⁷ is a road transport organization representing the interests of bus, coach, taxi and truck operators to ensure economic growth and prosperity through sustainable mobility of people and goods by road worldwide and through its commitment to sustainable development. CSR, which operated during 2006-2015, played an important role in promoting international action to limit the rise in road traffic fatalities. Its aim was to promote better sharing of roads and improve the driving behavior of all road users, both professional and non-professional, with training and educational programmes which meet internationally recognized standards.⁷⁸ The joint WHO and World Bank World Report on Road Injury Prevention, issued in 2004, warned that the rising trend in road crashes had become a major public health crisis. Unfortunately, however, road safety had been left out of the United Nations' Millennium Development Goals even though road crashes result in higher levels of fatalities than malaria or tuberculosis. In response, CSR was established in 2006 on the initiative of the FIA Foundation. Its aim was to raise the political response to road injuries, by defining an agenda of effective policy action, and ensuring that road safety be fully recognized by the UN as a global issue of sustainable development.

see

⁷⁶ http://www.irfnet.ch/

⁷⁷ www.iru.org

⁷⁸ For more information, commissions/commission-on-road-safety.

The CSR issued a number of reports during 2006-2013, with the support of the Make Roads Safe campaign where among others, it called for: A \$300 million Action Plan for the multilateral development banks to act together to improve the road safety impact of their road investments; the first ever global Ministerial Conference on Road Safety; a United Nations Decade of Action for Road Safety; a 50 per cent casualty reduction target supported by a "five pillar" Action Plan for Road Injury Prevention based on the Safe System Approach; the appointment of a United Nations Special Envoy for Road Safety; and the inclusion of road safety in the UN's post-2015 SDGs framework.⁷⁹ With the completion of these objectives, the Commission was wound up during the 2015 2nd High Level Global Conference on Road Safety held in Brasilia.

5.12 Global Network for Road Safety Legislators

This network⁸⁰ was launched in London in December 2016, to serve as a platform for parliamentarians to exchange best practices in road safety policies and legislation, representing an opportunity to mobilize political leadership in support of effective road safety policies and laws. Its leadership Council comprises parliamentarians from Asia, Africa, Europe, Latin America and North America. In May 2017, the "Manifesto #4RoadSafety" ⁸¹ was launched by the Global Network, and endorsed by the Leadership Council, who warned that on present trends it was unlikely that the United Nations' aim to halve road deaths by 2020 would be achieved. It includes ten key recommendations⁸² to encourage parliamentarians to support the current United Nation's Decade of Action for Road Safety (2011-2020), and endorses the WHO "Save LIVES" package of road injury prevention. Parliamentarians worldwide are being urged to endorse the Manifesto #4RoadSafety and sign a statement of support in advance of an important debate on road safety during the forthcoming 72nd Session of the United Nations General Assembly.

The package recommended adoption by all United Nations Member States, of laws to tackle speeding, drink driving, non-use of motorcycle helmets, seat belts and child restraints, and the application of acceptable vehicle and road safety construction standards. It also included recommendations on speed management and the Safe System approach, occupational road safety, good governance and funding for road injury prevention, the role of the multilateral development banks, as well as proposed the adoption of a new post- 2020 United Nations road safety target to halve road deaths and serious injuries by 2030.

5.13 Sustainable Mobility for AllTM (SuM4AllTM) initiative

SuM4All⁸³ is a global multi-stakeholder partnership that aims to help transform the transport sector. Its ambition is to make mobility: (i) equitable - ensuring that everyone has access to jobs and markets through good quality transport regardless of their economic or social status; (ii) efficient - to allow people and goods to move from place to place quickly and seamlessly; (iii) safe - by halving the number of global deaths and injuries from road traffic accidents and other modes of transportation; and (iv)

⁷⁹ See http://www.towardszerofoundation.org/about/global-commission/

⁸⁰ www.4roadsafety.org

⁸¹ Available at https://issuu.com/4roadsafety/docs/manifesto - online

⁸² See http://www.4roadsafety.org/wp-content/uploads/2017/05/4roadsafety-summary-of-recommendations.pdf

⁸³ http://www.sum4all.org/

green – by lowering the environmental footprint of the sector to combat climate change and pollution. Stakeholders include Multilateral Developments Banks; United Nations Agencies, Programs, and Regional Commissions; Bilateral donor organizations; Non-Governmental Organizations (NGOs); Global civil society organizations and Academic institutions.⁸⁴

Recently, the initiative issued the Global Mobility Report 2017 (GMR) (World Bank, 2017), which is the first-ever attempt to examine the performance of the transport sector globally, and its contribution to a sustainable future. With respect to transport safety, the report concluded that there was a need for a stronger strategic approach that includes all the transport modes, namely road, waterborne, air and rail transport. It suggested that building on target 3.6, the aim should be, in addition to halving the number of global deaths and injuries from road traffic accidents by 2020, to also reduce by 5 per cent the fatalities and injuries in each of the other modes of transport. However, due to the very poor and inconsistent information in many countries, it would be a challenge to measure safety with good, timely and quality data on fatalities and injuries in each mode of transport, and to identify the principal causes of crashes or incidents. It would also be important to have accurate information on risk, measured as passenger-kilometres, ton-kilometres and travel times.

6. Concluding remarks and recommendations

6.1 Legal and regulatory framework

This report was prepared as part of UNCTAD's contribution to the progress of implementing road safety targets in the context of the 2030 Agenda for Sustainable Development. It concentrates particularly on the international regulatory framework, highlights the potential relevance of implementing relevant existing conventions and other international instruments in the field of road safety, and overall, underlines the importance of supportive legal and regulatory framework as a means to improve the achievement of the sustainable development goals.

The report recognizes that both sustainable transport and sustainable, inclusive and high-quality infrastructure, are of cross-cutting importance for increasing economic growth, and attaining the SDGs. It highlights the concerted efforts, activities and initiatives undertaken by many international organizations and other bodies in the field of road safety. It also aligns UNCTAD's role to these efforts, pursuant to its renewed mandate, in accordance with the Nairobi Maafikiano, 85 to continue its work in the field of transport and trade logistics, as well its contribution to the effective implementation of international agreements and outcomes that recognize the role of transport infrastructure in the implementation of the 2030 Agenda. These include the relevant outcomes of the AAAA.

As already indicated, many developing countries have already become Parties to the UNECE worldwide legal instruments in the field, and/or are applying their rules. However, many others have not become Parties, some have only signed but have not ratified them, while others are Parties only

⁸⁴ For more information, see http://www.worldbank.org/en/topic/transport/brief/sustainable-mobility-for-all 85 See footnote 1 and Section 5.1 above.

to the old versions of the relevant instruments. In fact, according to UNECE, about 1 billion people live in countries not Parties to United Nations road safety conventions. In this context:

- Countries worldwide, and particularly developing countries, should consider acceding to and fully implementing the latest relevant versions of the United Nations legal instruments on road safety, as appropriate, in view of the fact that these reflect additions and updates to the international rules and requirements for road safety.
- Developing countries should strengthen their national road safety legislations, establish regional instruments and regulations, as appropriate, and work towards achieving greater consistency between those and the relevant international instruments.
- Collaboration among multiple stakeholders, including through regional and subregional organizations and institutions, should be strengthened. UNCTAD,
 alongside international organizations and bodies active in the field of road safety,
 could play a role by providing advice and assistance to policymakers and other
 stakeholders in developing countries, with respect to the effective
 implementation of the relevant international legal instruments at the national
 and/or regional level.

6.2 Infrastructure planning in support of road safety

In the AAAA, States expressed among others, their commitment to "support cities and local authorities of developing countries, particularly LDCs and SIDS, in implementing resilient and environmentally sound infrastructure, including energy, transport, water and sanitation and sustainable and resilient buildings using local materials" (para.34). In addition, they acknowledged that "insufficient investment is due to inadequate infrastructure plans and an insufficient number of well-prepared investable projects, along with private sector inventive structures that are not necessarily appropriate for investing in many long-term projects, and risk perceptions of investors." To address these constraints, States committed to "imbed resilient and quality infrastructure investment plans in (our) national sustainable development strategies, while also strengthening (our) domestic enabling environments." Internationally, they pledged to "provide technical support for countries to translate plans into concrete project pipelines, as well as for individual implementable projects, including for feasibility studies, negotiation of complex contracts, and project management" (para. 47). In this context:

- Infrastructure investment plans should continue to become a part of national sustainable development strategies. International organizations could potentially contribute to creating an enabling domestic environment in developing countries, by providing technical support to translate plans into concrete projects, and implement them. Road infrastructure safety elements and considerations should be included in these infrastructure projects. International organizations could also contribute with capacity building and skills development to ensure safe road design, road safety audits, and impact assessments.
- In view of the high urgency and sensitivity of the issue, governments of developing countries as well as their development partners, should integrate and mainstream road safety elements and considerations in support of the relevant sustainable development goals and targets, including target 3.6 of the 2030 Agenda for

- Sustainable Development, in relation to their infrastructure planning and projects, as soon as possible.
- In this context, it is also important to integrate climate considerations to enhance climate change adaptation and resilience for transport infrastructure.
- Governments and other stakeholders should embrace in their policies, actions known to be effective in reducing road safety risks, such as making cycling and walking safe and reducing the risks of motorized two-wheelers; as well as prioritize safety when adopting new technologies such as autonomous passenger cars or automated traffic control systems.
- Important input and contributions with respect to road safety matters, given by many international organizations and bodies, including Multilateral Development Banks, so far, have been very useful. In this context, UNCTAD expresses its readiness to continue to cooperate, while recognizing that future work in this field might require renewed efforts of funding and coordination.

6.3 Data needs

With respect to road safety, a recent key trend particularly worth noting, is the increased awareness on the need for better road statistics and timely country information and data on road fatalities and injuries. Such data need to contain sufficient information to identify the main causes of crashes or incidents, and be consistent so that they could be used for comparisons between countries.

- Data and statistics have an important role to play in tracking progress on the implementation of the sustainable development goals and targets through agreed indicators.⁸⁶
- Obtaining more data and statistics, including through use of new technologies, and their analysis, has the potential to provide previously unavailable depth of insight on a wide range of issues related to road safety, and should be prioritized.
- New and existing data technology and associated knowledge and expertise could help among others, with risk assessment, employee training, and programme monitoring. For instance, through improved risk assessment, as vulnerabilities and possible negative events and incidents are better identified, responsible stakeholders would be more able to prioritize their actions and responses to reduce such risk as much as possible in the first place.
- Through better identifying risks and vulnerable areas, gaps in training and training needs could be identified as well. For such training to be effective, customized courses adapted to the stakeholders' needs, policies and practices, could be very useful and is recommended.
- In addition, monitoring and tracking progress of relevant programmes and projects in general, would benefit from such new data, technologies, and customized training, contributing to improving compliance and helping stakeholders achieve the set objectives, for implementing the sustainable development goals.

⁸⁶ See footnote 16 above.

Annex

Table 10. Consolidated list of Contracting Parties to the main UN road traffic safety instruments, as at 30 November 2017

	I	I	I			I		ī
	Conv on Road Traffic, 1949	Conv on Road Traffic, 1968	P.Road Signs & Signals, 1949	C.Road Signs & Signals, 1968	Agr. Harm.Tec. UN Reg. 1958	Agr. Uni. Per. Inspect, 1997	Agr. Glo.Tec. Regul.1998	Agr.Carr.Dang. Goods, 1957
Albania	Х	Х	Х	Х	Х	Х		Х
Algeria	Х							
Andorra								Х
Argentina	Х							
Armenia		Х						
Australia	Х				Х		Х	Х
Austria	Х	Х		Х	Х			
Azerbaijan		Х		Х	Х		Х	Х
Bahamas		Х						
Bahrain		Х		Х				
Bangladesh	Х							
Barbados	Х							
Belarus		Х		Х	Х	Х	Х	Х
Belgium	Х	Х	Х	Х	Х			Х
Benin	Х							
Bosnia and Herzegovina		Х		Х	Х			Х
Botswana	Х							
Brazil		Х		S				
Bulgaria	Х	Х	Х	Х	Х	Х		Х
Burkina Faso	Х		Х					
Cambodia	Х		Х					
Canada	Х						Х	
Central African Republic	Х	Х		Х				
Chile	Х	S		Χ				
China							Х	
Congo	Х							
Costa Rica		S		S				
Cote d'Ivoire	Х	Х		Χ				
Croatia		Х		Χ	Χ			Х
Cuba	Х	Х	Х	Х			Х	
Cyprus	Х			Χ				Х
Czech Republic	Х	Х	Х	Χ	Х			Х
Democratic Republic of the Congo	Х	Х		Χ				
Denmark	Х	Х	Х	Χ	Х			Х
Dominican Republic	Х		Х					
Ecuador	Х	S	Х	S				
Egypt	Х		Х		Х			
Estonia		Х		Χ	Х	Х		Х
European Union					Х		Х	

	Conv on Road Traffic, 1949	Conv on Road Traffic, 1968	P.Road Signs & Signals, 1949	C.Road Signs & Signals, 1968	Agr. Harm.Tec. UN Reg. 1958	Agr. Uni. Per. Inspect, 1997	Agr. Glo.Tec. Regul.1998	Agr.Carr.Dang. Goods, 1957
Fiji	х							
Finland	х	х	Х	Х	Х	Х	Х	Х
France	х	х	Х	Х	Х		Х	Х
Georgia	х	х		Х	Х	Х		Х
Germany		х		Х	Х		Х	Х
Ghana	х	S		S				
Greece	х	х	Х	Х	Х			Х
Guatemala	х							
Guyana		х		Х				
Haiti	х		Х					
Holy See	х	S	Х	S				
Hungary	x	Х	Х	Х	Х	х	Х	Х
Iceland	х							Х
India	х		S	Х			Х	
Indonesia		S		S				
Iran (Islamic Republic of)		Х		Х				
Iraq		х		Х				
Ireland	х							Х
Israel	х	х	S					
Italy	х	х	Х	Х	Х		Х	Х
Jamaica	х							
Japan	х				Х		Х	
Jordan	х							
Kazakhstan		х		Х	Х	Х	Х	Х
Kenya		Х						
Kuwait		Х		Х				
Kyrgyzstan	х	Х	Х	Х				
Lao People's	х							
Democratic Republic								
Latvia		Х		Х	Х			Х
Lebanon	х		S					
Lesotho	х							
Liberia		Х		Х				
Liechtenstein								Х
Lithuania		Х		Х	Х		Х	Х
Luxembourg	х	Х	Х	Х	Х		Х	Х
Madagascar	х							
Malawi	х							
Malaysia	х				Х		Х	
Mali	х							
Malta	х							Х
Mexico		S		S				
Monaco	х	Х	Х					
Mongolia		Х		Х				
Montenegro	х	Х	Х	Х	Х			Х

	Road 149	pg «	8	∞	ن:			ļ
	Conv on Road Traffic, 1949	Conv on Road Traffic, 1968	P.Road Signs & Signals, 1949	C.Road Signs & Signals, 1968	Agr. Harm.Tec. UN Reg. 1958	Agr. Uni. Per. Inspect, 1997	Agr. Glo.Tec. Regul.1998	Agr.Carr.Dang. Goods, 1957
Morocco	х	х		Х				Х
Namibia	х							
Netherlands	х	х	х	Х	Х	Х	Х	Х
New Zealand	х				Х		Х	
Niger	х	х	Х					
Nigeria	х			Х				
Norway	х	х	S	Х	Х		Х	Х
Pakistan		х		Х				
Papua New Guinea	х							
Paraguay	х							
Peru	x	х						
Philippines	х	х		Х				
Poland	x	Х	Х	Х	Х			Х
Portugal	x	Х	Х	Х	X			Х
Qatar		х						
Republic of Korea	x	S		S	Х		Х	
Republic of Moldova		Х		Х	Х	Х	Х	Х
Romania	х	х	Х	Х	Х	Х	Х	Х
Russian Federation	x	Х	Х	Х	X	Х	Х	Х
Rwanda	х		х					
San Marino	x	х	х	Х	Х	Х	Х	
Saudi Arabia		х						
Senegal	х	х	Х	Х				
Serbia	х	х	Х	Х	Х			Х
Seychelles		х		Х				
Sierra Leone	х							
Singapore	х							
Slovakia	х	х	Х	Х	Х		Х	Х
Slovenia	х	х		Х	Х		Х	Х
South Africa	х	х			Х		Х	
Spain	х		Х	S	Х		Х	х
Sri Lanka	х							
Sweden	х	х	Х	Х	Х		Х	х
Switzerland	S	х	S	Х	Х			Х
Syrian Arab Republic	х							
Tajikistan		х		Х			Х	Х
Thailand	x	S	Х	S	Х			
The Former Yugoslav Republic of Macedonia		Х		Х	X			х
Togo	х							
Trinidad and Tobago	х							
Tunisia	X	Х	Х	Х	Х		Х	Х
Turkey	X	Х			X		Х	Х
Turkmenistan		X		Х				
Uganda	Х	<u> </u>	х					
Ukraine	1	Х		Х	Х	Х		Х

	Conv on Road Traffic, 1949	Conv on Road Traffic, 1968	P.Road Signs & Signals, 1949		Agr. Harm.Tec. UN Reg. 1958	Agr. Uni. Per. Inspect, 1997	Agr. Glo.Tec. Regul.1998	Agr.Carr.Dang. Goods, 1957
United Arab Emirates	х	Х		Х				
United Kingdom of Great Britain and	Х	S	Х	S	Х		Х	Х
Northern Ireland								
United States of America	Х						Х	
Uruguay		Х						
Uzbekistan		х		х				
Venezuela (Bolivarian Republic of)	Х	S		S				
Viet Nam	Х	Х		Х				
Zimbabwe	Х	Х						

REFERENCES

- ADB et al., (2014). Road Safety Guidelines. Multilateral Development Banks Road Safety Initiative. Available at http://publicaciones.caf.com/media/40517/1. road safety guidelines.pdf
- ADB et al., (2015). Upscaling Support and Developing A Shared Approach 2011 2015. Multilateral Development Banks Road Safety Initiative. Available at owed=y
- ADB et al., (2017). Progress Report (2015-2016) of the MDB Working Group on Sustainable Transport.

 January. Available at https://www.adb.org/sites/default/files/institutional-document/211966/mdb-progress-report-2015-2016.pdf
- African Union (2016). Draft African Road Safety Charter. Available at https://au.int/web/sites/default/files/newsevents/workingdocuments/29736-wd-e-
 https://au.int/web/sites/default/files/newsevents/workingdocuments/29736-wd-e-
 https://au.int/web/sites/default/files/newsevents/workingdocuments/29736-wd-e-
 https://au.int/web/sites/default/files/newsevents/workingdocuments/29736-wd-e-
 https://au.int/web/sites/default/files/newsevents/workingdocuments/29736-wd-e-
 https://au.int/web/sites/default/files/newsevents/workingdocuments/29736-wd-e-
- Ahmed I (2013). Road infrastructure and road safety. Transport and Communications Bulletin for Asia and the Pacific: Designing Safer Roads. No. 83. Available at www.unescap.org/sites/default/files/bulletin83 Fulltext.pdf.
- European Commission (2010). Towards a European road safety area: policy orientations on road safety 2011-2020 (COM82010) 389 final, 20.07.2010. Available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52010DC0389cv
- European Parliament and European Council (2008). Directive 2008/96/EC on road infrastructure safety management. 19 November 2008. Official Journal of the European Union, L 319, 29 November 2008. Available at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008L0096&from=EN
- European Union Office in Kosovo (2015). Road Safety and Action Plan for Kosovo. July 2015. Available at http://mi-ks.net/repository/docs/2015 11 05 091915 road safety strategy 20102015.pdf
- Journal of the Australasian College of Road Safety (2016). The Multilateral Development Banks' Road Safety Initiative. May.
- OECD/ITF (2008). Towards Zero. Ambitious Road Safety Targets and the Safe System Approach. Available at https://www.itf-oecd.org/sites/default/files/docs/08towardszeroe.pdf
- OECD/ITF (2014). IRTAD Road Safety Annual Report 2014. Available at https://www.itf-oecd.org/sites/default/files/docs/14irtadsummary.pdf
- OECD/ITF (2016). Zero Road Deaths and Serious Injuries. Leading a Paradigm Shift to a Safe System.

 Available at http://www.towardszerofoundation.org/wp-content/uploads/2016/10/Zero road deaths-SafeSystems.pdf
- OECD/ITF (2017a). IRTAD Road Safety Annual Report 2017. Available at http://www.oecd-ilibrary.org/docserver/download/7517011e.pdf?expires=1507657127&id=id&accname=guest&checksum=BA6B6546DDEDC178A3A528C155EC7091
- OECD/ITF (2017b). ITF signs path-breaking agreements on road safety, sustainable development, decarbonizing aviation and open data. Media Release. 8 June. Available at https://www.itf-oecd.org/itf-signs-path-breaking-agreements-road-safety-decarbonising-aviation-open-data
- The Guardian (2015). What would it take to halve the number of road deaths by 2020? 7 May.

- TowardsZeroFoundation (2017). 2020 UN target for road casualty reduction is unlikely to be achieved. 6 July.
- United Nations (2016). Resolution adopted by the General Assembly on 16 April 2016. Improving global road safety. A/RES/70/260. Available at http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/260&referer=/english/&Lang=E
- UNCTAD (2009). Maritime Transport and Climate Change Challenge. Summary of Proceedings of the Multi-Year Expert Meeting on Transport and Trade Facilitation. UNCTAD/DTL/TLB/2009/1. Available at http://unctad.org/en/docs/dtltlb20091 en.pdf
- UNCTAD (2010). Oil Prices and Maritime Freight Rates: An Empirical Investigation. UNCTAD/DTL/TLB/2009/2. Available at http://unctad.org/en/docs/dtltb20092 en.pdf
- UNCTAD (2011). Ad Hoc Expert Meeting on Climate Change Impacts and Adaptation: A Challenge for Global Ports Geneva, Palais des Nations, 29–30 September 2011. Main Outcomes and Summary of Discussions. UNCTAD/DTL/TLB/2011/3. Available at http://unctad.org/en/Docs/dtltlb2011d3 en.pdf
- UNCTAD (2012). Liability and Compensation for Ship-Source Oil Pollution: An Overview of the International Legal Framework for Oil Pollution Damage from Tankers.

 UNCTAD/DTL/TLB/2011/4. Available at http://unctad.org/en/PublicationsLibrary/dtltlb20114_en.pdf
- UNCTAD (2014a). Maritime Piracy (Part I): An Overview of Trends, Costs and Trade-related Implications. UNCTAD/DTL/TLB/2013/1. Available at http://unctad.org/en/PublicationsLibrary/dtltlb2013d1 en.pdf
- UNCTAD (2014b). Maritime Piracy (Part II): An Overview of the International Legal Framework and of Multilateral Cooperation to Combat Piracy. UNCTAD/DTL/TLB/2013/3. Available at http://unctad.org/en/PublicationsLibrary/dtltlb2013d3 en.pdf
- UNCTAD (2016). Nairobi Maafikiano. From decision to action: Moving towards an inclusive and equitable global economic environment for trade and development (TD/519/Add.2). Available at http://unctad.org/meetings/en/SessionalDocuments/td519add2 en.pdf
- UNECE (2009). Terms of Reference and Rules of Procedure of the Economic Commission for Europe.

 Fifth revised edition. Available at https://www.unece.org/fileadmin/DAM/oes/mandate/Commission Rev5 English.pdf
- UNECE (2010). Climate Change Impacts on International Transport Networks (2010). Note by the United Nations Economic Commission for Europe and United Nations Conference on Trade and Development secretariats. ECE/TRANS/WP.5/2010/3. Available at http://unctad.org/sections/wcmu/docs/ECE-TRANS-WP.5-2010-3e.pdf
- UNECE (2011). UNECE Plan to implement the United Nations Decade of Action for Road Safety (2011-2020). Available at http://www.unece.org/fileadmin/DAM/trans/doc/2012/itc/ECE-TRANS-2012-4e.pdf
- UNECE (2015a). Together with UNECE on the road to safety. Cutting road traffic deaths and injuries in half by 2020. Available at http://www.unece.org/fileadmin/DAM/trans/main/wp1/wp1doc/ECE_TRANS_255_FINAL.pdf
- UNECE (2015b). Transport for Sustainable Development The case of Inland Transport. September.

 Available at http://www.unece.org/fileadmin/DAM/trans/publications/Transport for Sustainable Develo pment UNECE 2015.pdf

- UNECE (2016). Road Safety for All. Available at https://www.unece.org/fileadmin/DAM/road_Safety/Documents/SDG_brochure_-
 Special_Envoy_for_Road_Safety.pdf
- UNECE (2017a). UN Sustainable Development Goals and the UN Transport Conventions under the purview of the UNECE Inland Transport Committee. Available at http://www.unece.org/fileadmin/DAM/trans/conventn/UN Transport Agreements and Conventions.pdf
- UNECE (2017b). Consultation paper for the establishment of a UN Road Safety Fund. Draft. Available at

 http://www.unece.org/fileadmin/DAM/road_Safety/Documents/Road_Safety_Fund_consolid_ated_21_September_2017.pdf
- UNESCAP (2017). Development of Road Infrastructure Safety Facility Standards for the Asian Highway Network. Available at http://www.unescap.org/sites/default/files/Main%20Report%20-%201%20May%202017.pdf
- United Nations (2016). Mobilizing Sustainable Transport for Development. Analysis and Policy Recommendations from the United Nations Secretary-General's High-Level Group on Sustainable Transport. Available at http://unctad.org/meetings/en/SessionalDocuments/td519add2_en.pdf
- WHO (2004). World Report on Road Traffic Injury Prevention. Available at http://apps.who.int/iris/bitstream/10665/42871/1/9241562609.pdf
- WHO (2011). Global Plan for the Decade of Action for Road Safety 2011-2020. Available at http://www.who.int/roadsafety/decade of action/plan/plan english.pdf?ua=1
- WHO (2013). Global Status Report on Road Safety 2013. Available at http://www.who.int/violence_injury_prevention/road_safety_status/2013/en
- WHO (2015a). Global Status Report on Road Safety 2015. Available at http://www.who.int/violence_injury_prevention/road_safety_status/2015/GSRRS2015_Sum_mary_EN_final2.pdf?ua=1
- WHO (2015b). Road safety in the SDGs. Available at https://www.fiafoundation.org/media/45263/werner-obermeyer.pdf
- WHO (2017a). Road traffic injuries. Fact sheet. Updated May 2017. Available at http://www.who.int/mediacentre/factsheets/fs358/en/
- WHO (2017b). 24th Meeting of the United Nations Road Safety Collaboration. 16-17 March 2017. UNESCAP, Bangkok, Thailand. Provisional Report. Available at http://www.who.int/roadsafety/24thUNRSCprovisional report.pdf?ua=1
- WHO (2017c). Save LIVES: a road safety technical package. Available at http://apps.who.int/iris/bitstream/10665/255199/1/9789241511704-eng.pdf?ua=1
- World Bank (2012). Global Road Safety Facility Strategic Plan 2013-2020. Available at http://documents.worldbank.org/curated/en/648551468171846983/pdf/841990WP0GRSF00
 Box0382132B00PUBLICO.pdf
- World Bank (2016). The World Bank Environmental and Social Framework. Available at http://documents.worldbank.org/curated/en/383011492423734099/pdf/114278-REVISED-Environmental-and-Social-Framework-Web.pdf
- World Bank (2017). Global Mobility Report, 2017. Tracking Sector Performance. Available at https://openknowledge.worldbank.org/bitstream/handle/10986/28542/120500.pdf?sequence=1&isAllowed=y

