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Item 10 (w) of the provisional agenda
Strategic questions of a horizontal and cross-sectoral policy or regulatory nature:
Draft Annual Report of activities undertaken by the Committee's subsidiary bodies in 2023

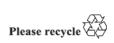
2023 Draft Annual Report of the Sustainable Transport Division of the United Nations Economic Commission for Europe

Note by the secretariat*

I. Introduction

- 1. The Year 2023 was a productive one for the Sustainable Transport Division and the Inland Transport Committee (ITC) of the Economic Commission for Europe (ECE). The the 85th Annual Session of the ITC held 21-24 February 2023, was focused on the creation of a unified strategy for reducing the impact of inland transportation on climate change using the tools and legal instruments of the ITC.
- 2. The transport sector accounts for almost a quarter of global energy-related CO_2 emissions (23 per cent). Inland transport contributes more than 71 per cent of all transport related emissions. These figures highlight the critical importance of inland transport, and the great potential it has to be a nexus of change. The Ministers and Transport leaders attending the 85th Annual Session agreed that creating a unifying action plan, which involved all modes of transport (including road, rail, and inland waterway) and using all the tools and legal instruments already available through the ITC, that a significant reduction in that 71 per cent of CO_2 emissions could be achieved.
- 3. While the creation of the definitive action plan was one of the key focuses in 2023, much was accomplished. The achievements range from the observation of the inaugural World Sustainable Transport Day highlighting the need for more sustainable transport systems to the adoption of the Convention on the Contract of Carriage of Goods by Rail as the first of a system of Conventions on Unified Railway Law.
- 4. This document provides an account of the accomplishments of the Sustainable Transport Division in 2023.

^{*} This document was scheduled for publication after the standard publication date owing to circumstances beyond the submitter's control.





II. Historic Highlight in 2023: The Inaugural World Sustainable Transport Day

- 5. In May 2023, the United Nations General Assembly adopted a resolution titled World Sustainable Transport Day (A/RES/77/286). Through this resolution the General Assembly declared 26 November as the World Sustainable Transport Day and invited all relevant stakeholders to mark the day by holding events which looked at the issues and possible solutions to creating global sustainable transport.
- 6. On 24 November 2023, ECE celebrated the first World Sustainable Transport Day with an event that included video addresses from Mr. Antonio Guterres, Secretary-General of the United Nations, Mr. Li Junhua, Under Secretary General UN DESA and Ms. Tatiana Molcean, Under Secretary General and Executive Secretary ECE. There were also three high level panels focusing on sustainable transport including a panel titled How transport supports our daily life, one titled How transport makes us safe, and a third titled How transport contributes to climate change agenda.

III. Accomplishments of the Sustainable Transport Division in 2022

A. The Eighty-Fifth Annual Session of the Inland Transport Committee

- 7. The eighty-fifth session of Inland Transport Committee (ITC) (in-person, 21-24 February 2023) started with a Ministerial segment on "Actions of the inland transport sector to join the global fight against climate change". The Ministerial was opened by H.E. Mr. Junhua Li, Under-Secretary-General, UN DESA and saw the participation from Africa, Asia, Europe, North America, Latin America, the Middle East, and the EU. The opening concluded with an award presentation for 75 years of partnership between ECE and the International Road Transport Union (IRU). Keynote speeches by H.E. Mr. Pete Buttigieg, Secretary of Transportation, USA; H.E. Mr. Andreas Carlson, Minister for Infrastructure of Sweden (Presidency of the Council of the European Union); Hon. General (Dr.) V.K Singh, Minister of State for Road Transport and Highways of India; and H.E Mr. Petteri Taalas, Secretary-General, World Meteorological Organization followed.
- 8. There were 550 participants from more than 84 countries, including 39 non-ECE ones, and the heads and high-level representatives of intergovernmental and non-governmental organizations as well as key inland transport stakeholders. The main highlights of the session included:
- (a) The endorsement of the Ministerial Declaration, "Harnessing the full potential of inland transport solutions in the global fight against climate change" (ECE/TRANS/328, Annex I).
- (b) A high-level side event of the ITC Road Safety Forum on 21 February 2023 (ECE/TRANS/328/Add.1, Annex II).
- (c) A high-level side event on "Enhancing connectivity and accelerating the transition to climate resilient, low-carbon transport systems in land-locked developing countries", on 22 February 2023 together with Turkmenistan (ECE/TRANS/328/Add.1, Annex III).
- (d) A side event on "Electric Vehicle Charging Infrastructure" on 22 February 2023 (see ECE/TRANS/328/Add.1, Annex IV).
- (e) A round table on "Inland transport connectivity and the 2030 Sustainable Development Agenda Challenges and opportunities for global economic development" on 24 February 2023 (ECE/TRANS/328/Add.1, Annex VI).

B. Horizontal activities

The Transport Health and Environment Pan-European Programme THE PEP

Capacity Building

9. In 2022 ECE (lead by the Sustainable Transport Division) launched LearnITC – the Inland Transport and Trade Connectivity eLearning Platform. LearnITC aims to provide member States and other stakeholders with a platform to learn about United Nations Inland Transport and Trade Connectivity principles and policies so as to facilitate member State accession and implementation to them. LearnITC currently contains 11 interactive courses from the wide spectrum of ITC activities as well as access to the Trade Implementation Facilitation Guide. To date, participants have launched over 650 courses from 79 countries. As the project continues, further courses plan to be added and targeted capacity building will be delivered to further understand and encourage its use.

C. The Global Forum for Road Traffic Safety (WP.1)

- 10. The Global Forum for Road Traffic Safety (WP.1) remains the only permanent body in the United Nations system that focuses on improving road safety. Its primary function is to serve as guardian of the United Nations legal instruments aimed at harmonizing traffic rules. The Conventions on Road Traffic and on Roads Signs and Signals of 1968, and other ECE legal instruments that address the main factors of road accidents are tangible contributors to improved road safety. Consequently, many countries across the world have become contracting parties to these legal instruments and thus benefit from their implementation. These contracting parties are also the key driving forces keeping these international road safety conventions up to date by participating in WP.1 sessions. Given this background, the Global Forum has continued playing an important role in facilitating and forging international cooperation to improve road safety.
- 11. In 2023, WP.1 continued its work in ensuring that new in-vehicle technology is when deemed necessary accompanied by new traffic rules. For example, WP.1 exchanged information with WP.29 and its subsidiary bodies by among others inviting the Working Party on Automated/Autonomous and Connected Vehicles (GRVA) Chair to its sessions, by planning and proposing joint events to share views and experience on the recent rapid technological advancements, and to offer timely provision of the appropriate guidelines for the road environment of the future. WP.1 has always stressed the importance of close cooperation with vehicle regulations subsidiary bodies.
- 12. In addition, WP.1 has finalized the amendment proposals to incorporate technical progress in the area of lighting and light signalling devices; is close to finalizing an overhaul of the 1968 Convention on Road Signs and Signals; is exploring digital driving permits; continues considering policy challenges of remote driving; and will keep overseeing the work of its Group of Experts on drafting a new legal instrument on the use of automated vehicles in traffic.
- 13. Finally, WP.1 will continue exploring the definition and role of the driver, driver education and training, and the possibility of contributing to developing a glossary of terminology for automated vehicles. Developing a framework of key principles for automated vehicle safety and human centred needs may become an important element of the WP.1 workplan in 2024. Also in 2024, in the context of ITS, the exchange of views will be continued with expected contributions from eminent academics and experts on many pertinent issues.

D. The Working Party on Road Transport (SC.1)

14. In 2023, SC.1 strengthened and advanced its programme of work. The SC.1 Group of Experts on Operationalization of eCMR (GE.22) met three times and prepared an extensive report containing proposed conceptual and functional specifications of a future eCMR system, operational procedures, use case analysis and historical review of the development of the CMR Convention and analysis on the use of consignment notes in different geographical

regions by customs. At its 118th session, SC.1 decided to seek an extension of the mandate of GE.22 at the forthcoming session of ITC in February 2024 for two years so that the Group may complete its work and time permitting, also prepare technical specifications.

- 15. The work of SC.1 in promoting safe and sustainable road infrastructure continues. Also, at its 118th session, SC.1 decided to create an informal group of experts on road infrastructure good practices. The informal group of experts will work with the Trans-European North-South Motorway Project (TEM) Project Manager and the secretariat on the development of a proposed capacity-building collaboration between SC.1 and the TEM Project with an initial focus on road safety inspections and road safety audits for the ECE region. As a first step in considering its contribution to the ITC Strategy on reducing greenhouse gas emissions from inland transport, SC.1 decided to include this matter as regular agenda item from its next session in 2024. In addition, SC.1 proposes to organize a half-day workshop, assisted by the secretariat, with presentations from industry and government to generate discussion and ideas on the contribution by SC.1.
- 16. On 31 October 2023, a second workshop on cross-border insurance of motor vehicles was organized by the secretariat jointly with ECA, ECLAC and ESCAP. The workshop was hosted by the Council of Bureaux at its premises in Brussels and participants were able to attend in person or virtually. Outcomes included the reaffirmation of the importance of having compulsory third party insurance for all motor vehicles as part of national road safety programs, the need for stronger cooperation between the different card systems, and the desire to work towards a greater harmonization of respective card systems via reinsurance and/or pooling, and other relevant cross-system cooperation.
- 17. Driving times and rest periods for professional drivers continued to be an important aspect of SC.1's work. Its subsidiary body, the Group of Experts on the European Agreement Concerning the Work of Crews of Vehicles Engaged in International Road Transport (AETR) continued its work on reconciliation of the AETR region in European Union and non-European Union AETR contracting parties as well as towards the introduction of the smart tachograph, following its application in the European Union as of June 2019.
- 18. Finally, throughout the year, following extensive reviews and discussions by the European Commission Services and ECE Secretariat, both sides were able to overcome legal barriers which allowed them to sign the Administrative Arrangement to extend the 2009 Memorandum of Understanding between the European Commission Services and ECE which recognizes the Joint Research Centre as the authority responsible for Root and Interoperability Certification for non-European Union AETR Contracting Parties, for the period 15 November 2023 to 31 May 2024 as the first step.

E. Working Party on Rail Transport (SC.2)

- 19. Building on the successes of previous years, the Working Party on Rail Transport (SC.2) continued to provide cutting-edge policy and regulatory contributions to the sector. During the Working Party session, a workshop was held titled The Future of International Rail Passenger Transport. Over 80 registered delegates exchanged views, best practices and concrete examples on how best to ensure that the railways can deal with climate related emergencies.
- 20. This year saw a major amendment to the European Agreement on Main and International Railway Lines (AGC) by contracting parties introducing the concept of International Railway Passenger Hubs to the AGC network with the aim of further facilitating access to the railways and modal shift.
- 21. At its session in February 2023, ITC adopted the Model Rules on the Permanent Identification of Railway Rolling Stock and the creation of its Revisions Committee which facilitates the identification of rolling stock across the world, thus making their financing easier and cheaper and, consequently facilitating further modal shift to rail resulting in a reduced environmental footprint of the transport sector. At the first session of the Revisions Committee, an amendment to the Model Rules was prepared which was then adopted by the Working Party on Rail Transport at its November session.

22. The Working Party also proceeded with the finalisation of a new Convention on the Contract of Carriage of goods by rail. During a special session of the Working Party the draft text of the Convention was finalised and at the regular session of the Working Party in December, member States present adopted the Convention on the Contract of Carriage of Goods by Rail as the first of a system of Conventions on Unified Railway Law.

F. Working Party on Inland Water Transport (SC.3)

- 23. The Working Party on Inland Water Transport (SC.3) and its subsidiary body, the Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation (SC.3/WP.3), continued their activities in 2023.
- 24. As a follow-up of the ITC decisions at its eighty-fifth session, SC.3 at its sixty-seventh session (a) considered aligning of its terms of reference and rules of procedure with the ITC governance framework, and (b) approved the proposal on reviewing the SC.3 mandate as amended at the session (ECE/TRANS/SC.3/2023/16). In line with its decision taken at its sixty-third session, SC.3 reviewed and adopted its programme of work for 2024–2025 and the relevant parameters for its biennial evaluation. The secretariat was asked to submit the adopted programme of work to ITC.
- 25. In the field of regulatory work and capacity development aimed at promoting international agreements related to inland water transport and responding to Sustainable Development Goals 8, 9 and 13 the following events were held in 2023:
- (a) Workshop Addressing Labour Market Challenges and Making the Sector More Attractive on 3 July 2023, organized jointly with the European Transport Workers' Federation. Based on the outcome of the workshop, the secretariat made a presentation at the Technical Meeting on Decent and Sustainable Work in the Inland Waterways Sector held in Geneva, from 20 to 24 November 2023 by the International Labour Organization.
- (b) Workshop Climate Change Mitigation Activities in Inland Water Transport on 11 October 2023 dedicated to strategies, programmes and projects in this field, progress made by countries, international organizations and other key stakeholders, and the way forward. The outcome of the workshop was the basis for SC.3 proposals to the draft ITC strategy.
- (c) As a follow-up of ITC resolution No. 269 Facilitating the Development of Container Transport on Inland Waterways, both Working Parties continued discussion on facilitating the alignment between the European Agreement on Main Inland Waterways of International Importance and the Protocol on Combined Transport on Inland Waterways to the European Agreement on Important International Combined Transport Lines and Related Installations.
- 26. Responding to Sustainable Development Goal 9, SC.3 in 2023 finalized and approved the fourth revision of the Inventory of Main Standards and Parameters of the E Waterway Network ("Blue Book"), which incorporated amendments Nos. 1 to 5 made in 2018 to 2022 and recent updates and will be available as a publication in the three working languages and as an updated Blue Book database on the ECE website.
- 27. Responding to Sustainable Development Goals 9 and 13, SC.3 in 2023 delivered the following outputs in the field of regulatory work:
 - Amendment No. 2 to the second revision of the Inventory of Most Important Bottlenecks and Missing Links in the E Waterway Network
 - Amendments to the sixth revision of the *European Code for Inland Waterways* (CEVNI)
 - Amendment No. 5 to the second revision of resolution No. 61 Recommendations on Harmonized Europe-Wide Technical Requirements for Inland Navigation Vessels as resolution No. 105
 - Revised resolution No. 15 Ship-Borne Barges as resolution No. 106

- Amendment No. 2 to addendum No. 1 to the annex of resolution No. 21 Prevention of Pollution of Inland Waterways by Vessels, revision 2
- Revised Guidelines and Criteria for Vessel Traffic Services on Inland Waterways (annex to resolution No. 58), aligned with the Guideline Vessel Traffic Services in Inland Waters of the International Association of Marine Aids to Navigation and Lighthouse Authorities, as resolution No. 107.
- 28. In the field of automation, smart shipping and innovations in inland water transport (Sustainable Development Goals 6, 9 and 14), the following capacity building events were held:
- (a) Workshop Information and Computerization Technologies and Intelligent Transport Systems in the Inland Water Transport Sector, held on 15 February 2023. The participants continued with the round table discussions on the various aspects of ICT and ITS and provided recommendations for SC.3.
- (b) At its sixty-seventh session, SC.3 discussed progress in implementation of the road map of the 2020–2024 Forging international cooperation towards an international legislative basis for automation in inland navigation (annex to resolution No. 95) and decided to prepare a road map for 2025–2028, based on the outcome of the discussion.
- (c) Both Working Parties continued discussion on the definitions for automation and smart shipping based on the definition of automation levels in inland navigation edition 2022 adopted by the Central Commission for the Navigation of the Rhine (CCNR). SC.3 considered it desirable to prepare a resolution on this issue to ensure consistency of the terminology at the pan-European level.
- (d) In 2023, both Working Parties continued discussion on harmonizing the ECE legal framework and policy areas for fostering innovations in inland navigation, in particular, policy areas and proposals for evaluation of international conventions and ECE resolutions to identify gaps, challenges and bottlenecks that hamper the development of automated navigation applicable to the traffic on inland waterways in the ECE region.
- 29. In the field of regulatory framework for recreational navigation, that is linked to Sustainable Development Goal, Target 8.9, SC.3 (a) considered updates to annex IV of resolution No. 40 "International Certificate for Operators of Pleasure Craft" (ICC) and took note of new entries to the ECE online database of ICC specimens and (b) approved the second revision of the *Guidelines to Resolution No. 40*, Pleasure Craft (ICC) and requests from recreational boaters on the recognition of ICC. SC.3 recognized the need to consider initiating a review process of resolution No. 40 and asked the secretariat to collect the necessary information, analyse the existing situation and present a progress report for the Working Parties in 2024.

G. Working Party on Transport Trends and Economics (WP.5)

1. Coordination Committee on the Trans-Caspian and Almaty-Tehran-Istanbul Corridors

- 30. On the occasion of the thirty-sixth annual session of WP.5, the WP.5 Chair and Vice-Chair together with the secretariat and the Corridor Coordinators (Georgia and Uzbekistan) appointed in the framework of the Economic Commission for Europe (ECE)-Economic Cooperation Organization (ECO)-Coordination Committee on the Trans-Caspian and Almaty-Tehran-Istanbul Corridors, provided a progress update on operationalization efforts made in the framework of the Committee since its establishment in 2022. The outcomes from the first three sessions of the Coordination Committee (held in Geneva, December 2022; Istanbul/ Türkiye, June 2023 and Baku, July 2023) as well as the Committee's endorsed Terms of Reference and a 2023–2025 biennial programme of work was presented, as contained in ECE/TRANS/WP.5/2023/1.
- 31. The Working Party was informed that the biennial work plan of the Coordination Committee, which currently consists of representatives from ministries of transport, railway agencies and customs authorities from Azerbaijan, Georgia, Iran (Islamic Republic of),

Türkiye, Kazakhstan, Kyrgyzstan, and Uzbekistan focus on five agreed thematic clusters of work, aimed at:

- (a) Evaluation and prioritization of transport infrastructure construction and renewal requirements including for rolling stock and pool containers as well as missing infrastructure links.
- (b) Digitalization, harmonization, and standardization of transport documents in use on the corridors (cover both uni- and multi-modal documentation).
- (c) Assessment of the availability of reliable corridor-wide agreed timetables and tariffs.
- (d) Evaluation of en-route border crossing efficiency on both corridors as well as identification, prioritization, and implementation of border crossing facilitation initiatives.
- (e) Strengthening of the economic viability and resilience as well as environmental performance of the corridors.
- 32. The representative of ECO expressed support for the continuation of the work of the Coordination Committee and informed that the United Nations General Assembly at its seventy-seventh session (August 2023) had adopted by consensus a resolution titled Cooperation between the United Nations and the Economic Cooperation Organization (A/77/L.102) which inter alia "Takes note of the joint initiative to establish an ECE-ECO Coordination Committee on the Trans-Caspian and Almaty-Tehran-Istanbul Corridors, with a view to contributing to increasing the East-West and North-South transit potential through policy coordination, infrastructure development, logistics improvement and technical and financial support".
- 33. The Working Party welcomed the progress report provided on the work of the ECE-ECO Coordination Committee on the Trans-Caspian and Almaty-Tehran-Istanbul Corridors convening as an informal group of friends of the Chair of the WP.5. It appreciated the fact that the Coordination Committee had adopted its Terms of Reference and a detailed 2023–2025 programme of work and encouraged the countries to implement it effectively.
- 34. The Working Party also welcomed the appointment for an initial one-year period of the two Corridor Coordinators (Georgia and Uzbekistan). The Working Party thanked the representatives and noted the importance of continuing the work on evaluating current actions, the importance of monitoring and the work on tariffs and time schedules as crucial elements in further operationalizing both corridors.
- 35. The Working Party welcomed the overview of ongoing and planned operationalization activities in support of the Trans-Caspian and Almaty-Tehran-Istanbul corridors as contained in ECE/TRANS/WP.5/2023/2. It encouraged the Committee Members to continue updating this coordination table and include references to:
- (a) National/ bilateral/ subregional initiatives and work streams being undertaken by individual governments (national railway undertakings, authorities in charge of transport and infrastructure and customs agencies) which are of relevance to the entire corridors.
- (b) International/regional activities and/or regulatory work being undertaken, where appropriate, in the framework of relevant Working Parties under purview of the ECE ITC and the Economic Cooperation Organization (ECO) of direct relevance to the entire corridors.
- 36. Further hybrid and in-person Coordination Committees will be hosted in the course of 2024.

2. Thematic workshop on cyber threats to electric vehicles and their charging infrastructure

37. On 5 September 2023, in conjunction with the thirty-sixth annual session of WP.5, a workshop on Cyber threats to electric vehicles and their charging infrastructure co-organized by the ECE Sustainable Transport and Sustainable Energy sub-programmes was held in the framework of the annual 2023 ECE Inland Transport Security Forum. The event featured keynote speakers from a variety of stakeholders including the secretary of the ECE Working

Party on Automated/ Autonomous and Connected Vehicles (GRVA/WP.29), the secretary of the ECE Group of Experts on Cleaner Electricity Systems, the Institute for Security and Safety GmbH/ Mannheim University for Applied Sciences, the International Organization of Motor Vehicle Manufacturers (OICA), Continental Automotive Technologies GmbH as well as relevant cyber security authorities from the Netherlands and Türkiye.

- 38. The workshop provided a platform to:
 - Raise awareness about the broad variety and complexity of cyber threats posed to electric vehicles (EVs) and their charging infrastructure as well as the systemic implications this may have for the broader electricity grid.
 - Exchange views, ideas, and national experiences on how to better identify, prevent and manage such threats and vulnerabilities.
 - Learn from good practices implemented by EV manufacturers, in line with globally harmonized vehicle requirements.
 - Identify possible next steps and mitigation actions to be taken in this field by member States and other relevant stakeholders, with the support of the ECE sustainable transport and energy sub-programmes.
- 39. Panellists and participants took stock of the various cyber threats faced by EVs and EV charging infrastructure as well as in their interaction with the broader electricity grid and identified possible preventative actions that can be taken by governments and other relevant actors. The GRVA secretary provided an overview of actions being taken at regulatory level to prepare the automotive sector for such risks.
- 40. In terms of possible cyber threat mitigation actions that could be taken by governments and other relevant stakeholders participants exchanged views on the possibility to introduce enhanced security measures and authentication protocols as well as conduct regular security audits. Emphasis was also put on the need for improved multi-stakeholder cooperation (including at the level of governments, regulators, automotive manufacturers, charging infrastructure providers and cyber security experts) and the development of real time monitoring systems and enhanced incident response capabilities.
- 41. The concept note, programme and full set of presentations delivered at the workshop are available at: https://unece.org/info/events/event/381119.

3. International Transport Infrastructure Observatory

- 42. The International Transport Infrastructure Observatory (ITIO-GIS.org) is an initiative of ECE Sustainable Transport and IsDB. It is a multi-stakeholder, web-based GIS platform which hosts data on a large variety of transport infrastructure networks and nodes across different modes including road, rail, inland waterways, ports, airports, intermodal terminals, logistics centres and border crossing points.
- 43. At this stage, ITIO contains data from 79 United Nations Member States/ to be expanded with a further 27 United Nations Member States by 2024. It currently accommodates some 34 accredited national focal points from Government institutions, regional organisations, and multilateral development banks. An ITIO follow-up extrabudgetary project is under preparation to improve and expand ITIO functionalities and scope for geographical outreach.

4. Adaptation of transport to climate change

44. A Group of Experts on Assessment of Climate Change Impacts and Adaptation for Inland Transport (GE.3) operating under WP.5 auspices commenced its activities in 2020 focusing on: (a) raising awareness, building capacity and integrating knowledge from countries and scientific community on climate change impact assessment and adaption for transport, and (b) further advancing the state of knowledge, the analysis of climate change impacts on inland transport and identification of suitable and costs-effective adaptation measures.

- 45. During 2023 the Group of Experts analysed projections for heatwaves and heavy precipitation. In particular GE.3 focused on analysing the exposure of transport system to heatwaves and heavy projections in terms of additional days at which temperature or precipitation were expected to exceed given threshold levels. This increased exposure was also analysed in terms of current transport disruptions and their consequences which occurred when the temperature or precipitation levels exceeded the given thresholds. This work is to offer a foundation for a more detailed analysis for the necessary analysis and setting up intervention programmes to maintain optimal resilience level of transport systems. The Group developed a framework for stress testing transport asset to climate change hazard. This framework is helpful for identifying vulnerabilities, assessing risks, and planning adaptation or risk reduction measures against selected extreme scenarios, e.g. 1 in 100/500 years flood events. It explains the subsequent steps to be undertaken in an effective test. It discusses the methods for the stress test from qualitative to quantitative ones. Transport professionals are invited to use the framework to assess the resilience levels of their assets and networks.
- 46. GE.3 prepared an advanced version of a guide on adaptation pathways in transport. Adaptation pathways can be broadly described as a sequence of interlinked and flexible actions that can be progressively implemented, based on future dynamics and changes to risk, through early actions that do not compromise future actions and assist in providing overall adaptation to climatic changes. The guide explains the application of adaptation pathways in transport and discusses the steps for an effective implementation of adaptation pathways for transport networks and assets. It also explains challenges with this approach and advises how to avoid pitfalls.
- 47. GE.3 also started its work on guidance on network criticality assessment. It also continued to raise awareness of the need for action in adapting transport to climate changes. To this end, it organized two events during 2023. The first of them was a Conference on adaptation of transport in the Mediterranean region to climate change which took place in Marseille on 15 and 16 May 2023. This conference focused on raising awareness on adaptation of transport infrastructure to climate change and on setting up effective intervention programmes. It was organized jointly with ESCWA, France (Directorate General of Infrastructure, Transport and Mobility and Région Provence-Alpes-Côte-d'Azur) and CETMO. It was attended by 60 participants from 15 countries. It featured not only panel discussions and presentations but also hands-on work in break-out groups on climate projections and their meaning.
- 48. The second of the events comprised a foresight session organized during the PIARC World Road Congress in Prague on 6 October 2023 on stress test as a tool to assess the resilience of road asset to climate change hazard. The session featured a panel which discussed issues such as what is a road asset, what are the observed impacts from extreme weather events and how they affect service provision by roads, what is an economically optimal resilience level of a road asset and what are the options to carry out the stress tests. The panel was followed by a simulation of a stress-test using a qualitative (expert opinion-based) method.

5. Cycling infrastructure

- 49. In support of the implementation of THE PEP Pan-European Cycling Master Plan a Group of Experts on Cycling Infrastructure Module (GE.5) has been established under WP.5 auspices. The mandate of the Group is to serve as a platform to collect and analyse data on national cycling infrastructure, and to propose an ECE cycling network, based on existing national and EuroVelo cycling routes. Its second task involves the elaboration of common definitions for various types of cycling infrastructure as well as new road signs for signposting the cycling routes.
- 50. GE.5 during 2023 has been progressing towards a designation of the ECE cycling network. GE.5 agreed on three principles for devising the ECE network from national networks such as (i) Relevant EuroVelo route or routes can serve as a backbone for ECE routes on a territory of an ECE country if and as appropriate for the country, (ii) ECE network routes should be long-distance routes, and (iii) ECE network routes should enable cross-border connectivity. GE.5 also agreed on a density indicator for the network of 40-100km of routes per 1000km2.

- 51. The Group elaborated an advanced version of a guide for designating national cycling network. This guide describes the sequential steps to be taken in the process of designation and implementation of a cycling network. It is expected to be finalized in early 2024 and should serve interested countries and their authorities in undertaking action aimed at putting in place safe and cyclist-friendly networks at various levels.
- 52. Last but not least, GE.5 continued its work on elaboration of common definitions for various types of cycling infrastructure as well as started assessing their impacts on the provisions of the 1968 Convention on Road Signs and Signals. To this end, GE.5 started to formulate recommendations for modifications to the Convention so that it can better address cycling.

6. Benchmarking transport infrastructure construction costs

53. At the WP.5 thirty-fifth annual session, the Chair of the Group of Experts on Benchmarking Transport Infrastructure Construction Costs (WP.5/GE.4) together with lead country Türkiye (on road) and Polish Railways (on rail) presented the final report of the Group as contained in ECE/TRANS/WP.5/2022/6.

H. Working Party on Transport Statistics (WP.6)

- 54. The 2023 Statistics of Road Traffic Accidents in Europe and North America publication has been developed and is scheduled for release by early 2024. The data sets presented in this publication are used to monitor progress towards the corresponding target 3.6 of Sustainable Development Goal 3, as well as target 9.1 of Sustainable Development Goal 9 and target 11.2 of Sustainable Development Goal 11.
- 55. The development of a Sustainable Development Goal microsite is currently in progress. The microsite will display progress on global indicators, ECE-specific transport indicators, as well as transport indicators chosen by countries to monitor their unique circumstances.
- 56. Additional efforts have been made to ensure that collected data is disseminated to policymakers in the most appropriate way. WP.6 has therefore produced an online, interactive version of the transport statistics, Infocard; a dashboard that highlights key indicators like road safety progress and modal split. Further, an experimental data story has been produced on road safety, combining interactive data visualisations with narrative using a "scrollytelling" approach.
- 57. The secretariat of WP.6 is currently collaborating with other international partners to produce data on electric vehicle charging infrastructure. A roundtable on this topic has been organized to gather feedback from member States regarding international definitions and suitable indicators for consistent measurement.

I. Working Party on Transport of Perishable Foodstuffs (WP.11)

- 58. The Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for such Carriage (ATP) is intended to ensure that deep-frozen and chilled foodstuffs are transported efficiently, safely and hygienically and do not pose a danger to human health. It also helps countries avoid the waste of food through spoilage caused by poor temperature control during carriage.
- 59. Fifty-two countries including non-ECE countries (Islamic Republic of Iran, Morocco, Tunisia and Saudi Arabia) are contracting parties to the ATP.
- 60. The ATP agreement provides common standards for temperature-controlled transport equipment such as road vehicles, railway wagons and containers and the tests to ensure the insulating capacity of the equipment and the effectiveness of thermal appliances. By regulating the equipment and by ensuring the carriage of perishable foodstuffs under harmonized and high-level conditions that preserve their quality, the ATP contributes to:
 - (a) Facilitate the trade of temperature-sensitive goods,

- (b) Create a level playing field in the road haulage industry that ensures the quality and safety of the transported goods (target 8.2),
- (c) Prevention of possible diseases from products arriving for consumption under poor conditions of preservation (target 3.d).
- 61. The transport of chilled and deep-frozen foodstuffs impacts on climate change on a number of levels:
- (a) Use of new insulating foams and blowing agents that are both safe for the ozone layer and highly effective (target 9.5);
- (b) Determination of fuel consumption of vehicle-powered refrigeration units in order to increase energy efficiency and reduce emissions;
- (c) Determination of the insulating capacity of isothermal transport equipment (K value) that directly influences the final CO₂ emissions of a thermal engine;
- (d) Develop energy-labelling schemes or minimum-efficiency standards for the refrigerated transport industry, which have shown a push of the market towards more energyefficient products (target 9.4).
- 62. ATP contributes to the overall reduction of food waste due to inadequate transport conditions. The waste of millions of tonnes of foodstuffs is also a waste of very scarce or non-renewable resources in production, such as land, water, energy, and chemical fertilizers and pesticides, and contributes to global warming. Food security is also affected by the waste of foodstuffs (targets 2.1 and 2.2, target 8.4 and targets 12.2, 12.3 and 12.5).
- 63. The ECE secretariat will prepare a revised consolidated edition of the ATP agreement to take account the amendments accepted during 2021-2022. Activities in the transport of perishable foodstuffs contribute to achieving sustainable development in its three dimensions (economic, social and environmental), in particular as it relates to Sustainable Development Goals 2, 3, 8, 9 and 12 and their related targets.

J. Transport of dangerous goods and classification and labelling of chemicals, including the Work of ECOSOC bodies serviced by the Sustainable Transport Division

- 64. The Sustainable Transport Division work on administering and making available legal instruments as well as the related ECOSOC recommendations for transport of dangerous goods by all modes, and for the classification and labelling of chemicals contribute to the safe management of chemicals through their life cycle (production, storage, transport, workplace and consumer use)." In 2023, the following international legal instruments regulating air, maritime and land transport of dangerous goods that were updated following the transposition of the provisions contained in the Model Regulations (22nd revised edition) and the Globally Harmonized System of Classification and Labelling of Chemicals (9th revised edition) prepared by the ECE secretariat in 2021 entered into force or may be applied in a voluntary basis as from 1 January 2023:
 - For air and maritime transport, "ICAO Technical Instructions for the safe transport of dangerous goods by air (2023/2024 edition)" and "International Maritime Dangerous Goods Code" (IMDG Code, 2022 edition, including amendment 41-22)
 - For inland transport, the provisions of the 2023 edition of ADR, RID and ADN which were adopted by the relevant intergovernmental bodies in 2022, ensure alignment with those in the twenty-second revised edition of the Model Regulations and entered into force on 1 January 2023. They became mandatory for the international transport of dangerous goods by road, rail and inland waterways between the contracting parties to these agreements (54 for ADR, 45 for RID and 18 for ADN) and for domestic traffic in the territories of all European Union Member States
- 65. At its 113th and 114th sessions, the Working Party on the Transport of Dangerous Goods (WP.15) welcomed the actions of ITC on climate change adaptation and mitigation, and contributed to the development of the ITC strategy on the reduction of greenhouse gas

emissions in inland transport. Its work was guided in particular by United Nations Sustainable Development Goals: 3 (Ensure healthy lives and promote well-being for all at all ages), 11 (Make cities and human settlements inclusive, safe, resilient and sustainable) and 13 (Take urgent action to combat climate change and its impacts).

- 66. The ADN Safety Committee successfully held a workshop on sustainable development and climate change from the perspective of the transport of dangerous goods on inland waterways.¹
- 67. Following the endorsement by the ECOSOC Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals of the recommendations made by its two sub-committees, the secretariat prepared, for worldwide implementation and use, new consolidated revised editions of the Model Regulations (Rev.23) and the GHS (Rev.10) as well as the 8th revised edition of the Manual of Tests and Criteria. The work in 2023 of both sub-committees contributed again to the achievement of the 2030 Agenda in the social, economic and environmental areas, and in particular to sustainable development goals 3, 6, 8, 12, 13, 14 and 16.

K. Working Party on Intermodal Transport and Logistics (WP.24)

- 68. The Working Party on Intermodal Transport and Logistics (WP.24) continued its effort to strengthen the frameworks for sustainable intermodal transport and logistics operations as well as the intermodal transport and logistics policies in the ECE region. They also worked to enhance cooperation of ECE member countries on intermodal transport and logistics through the exchange of experiences and good practices.
- 69. WP.24 held a workshop to on ways to create demand for intermodal transport and on ways to analyse the potential for modal shift. The workshop focused on exploring freight transport pricing, reliability, but also knowledge of the advantages and disadvantages of different freight transport operations in the sector and by society at large. The discussion was aimed at exchanging practices and experience and at creating better understanding of the variety of measures to be put at the disposal of the sector to bring a level-playing field to the freight sector, but also about action needed to improve the business case for intermodal/combined transport. The potential actions for creating more demand for intermodal transport can be consulted at the workshop's webpage at: https://unece.org/info/Transport/Intermodal-Transport/events/386576.
- 70. WP.24 continued its work to modernize the European Agreement on Important International Combined Transport Lines and Related Installations. Like the previous years, the Agreement was further updated on lines and installations to reflect the planned or implemented changes to the network and installations. A new tool has been further updated, based on GIS, which allows member States, operators and other stakeholders to identify the minimum parameters of the network. The tool helps, among others benefits, to better understand the degree of the implementation of the Agreement.
- 71. WP.24 elaborated an initial version of a framework on information and document digitalization for intermodal transport. This framework discusses data and information flows between parties involved in a carriage of intermodal transport, among them consignor, consignee, carrier and subsequent carriers. This also concerns data and information exchanges in circumstances preventing carriage or delivery or in case of missing goods, or when subsequent instructions on carriage are provided.WP.24 would continue to refine its framework. It would hold a simulation in 2024 on a carriage facing challenges such as e.g. cargo loss or damage to verify all the necessary data and information flows to be recorded.
- 72. WP.24 started its work on elaboration of a handbook on automation in freight intermodal transport and logistics. It also continued its discussion on how to set up, if possible, appropriate targets for intermodal transport based on rail unitization rate and rail modal share for ECE countries for this purpose.

¹ Details available at: https://unece.org/info/Transport/Dangerous-Goods/events/370093

73. WP.24 also noted the progress made and agreed with specific proposals for updates to the CTU Code. It would continue working on these updates with relevant bodies of International Labour Organization and International Maritime Organisations with the aim to have the revised CTU Code adopted in the near future.

L. The World Forum for Harmonization of Vehicle Regulations (WP.29)

General considerations

- 74. The work of the World Forum and its six subsidiary Working Parties, so called GRs, is reflected in the annual WP.29 Programme of Work (ECE/TRANS/WP.29/2023/1/Rev.1), which provides a detailed overview of the distribution of the areas of work among the different groups as a result of the processes of work prioritization, setting of timelines and delivery targets, and of the alignment with the ITC Strategy.
- 75. More than forty Informal Working Groups (IWG) worked during 2023 in parallel to the World Forum and to its subsidiary bodies to assist them in developing new vehicle regulations and updating the 165 existing UN Regulations annexed to the 1958 Agreement, twenty-four United Nations Global Technical Regulations (UN GTRs) under the 1998 Agreement and four UN Rules annexed to the 1997 Agreement with 115 amendments in total, and it established three new UN Regulations and one new UN GTR.
- 76. At the 189th session, March 2023, the World Forum celebrated its seventy anniversary and the sixty-fifth anniversary of the 1958 Agreement. At the 190th session, June 2023, the World Forum celebrated the twenty-fifth anniversary of the 1998 Agreement.

Vehicle automation

- Following the restructuring of WP.29 in June 2018 to implement ITC Decision No. 19 of 2018 and the establishment of the Working Party on Automated/Autonomous and Connected Vehicles (GRVA), WP.29 and its subsidiary bodies worked according to the Framework Document Automated/Autonomous on Vehicles (ECE/TRANS/WP.29/2019/34/Rev.2), endorsed by ITC at its eighty-second session, which guided the work on automated vehicles. This work, led by Co-Chairs from America, Asia and Europe, is performed in line with the safety vision, key safety elements, and guidance provided by the framework document to the Working Parties of WP.29 and in line with the programme of activities included in its annex, which is aimed to be suitable for the countries under the regime of type approval and the countries under the regime of self-certification. These activities form a novel initiative aimed at harmonizing globally automated vehicles regulations and creating a more productive environment for innovation. In 2023, the highlights produced under the Framework Document include a further update of the New Assessment/Test Method for Automated Driving (NATM) - Master Document, the work of a common final document representing the work of the IWGs on Functional Requirements for Automated and Autonomous Vehicles (FRAV) and on Validation Methods for Automated Driving (VMAD), which is considered as a basis for new regulations for Automated Driving Systems under both the 1958 and 1998 Agreements as well as the draft recommendations for automotive cyber security and software update.
- 78. Furthermore, GRVA embarked in the process of drafting a UN Regulation for Driver Control Assistance Systems (DCAS). With this new provisions, currently available and already widely spread technologies still under Level 2 of automation, will be clearly distinguished from those providing for full automated driving and thus allowing drivers to engage in other tasks than driving (see also Global Forum for Road Traffic Safety (WP.1) Resolution on safety considerations for activities other than driving undertaken by drivers when automated driving systems issuing transition demands exercise dynamic control) still requesting drivers to stay in control.

1958 Agreement

79. WP.29 established a new UN Regulation No. [168] on global Real Driving Emissions will contribute to the protection of the environment and provide realistic information on

emission of CO_2 of new vehicles. With the new UN Regulation No. [169] on Event Data Recorder for heavy Duty Vehicles, traffic crash investigations involving these vehicles will benefit from access to information captured immediately before and during the crash. The new UN Regulation No. [170] for Restraint systems for Safer Transport of Children in buses will largely contribute to increased safety for the most vulnerable group, children, during crashes when transported in buses.

- 80. Existing UN Regulations and related Resolutions were updated by 114 amendments, which adapt the regulations to the most recent technological innovations and introduce more stringent limits aimed at increasing both the safety and environmental performance of vehicles.
- 81. As funding for the hosting of DETA at the Economic Commission for Europe (ECE) could not be secured so far both under the regular budget or extra budgetary resources. WP.29 was grateful to Germany who is currently hosting the system on an interim basis. WP.29 would continue to look into possibilities for sustained solutions for the funding of the hosting of DETA.
- 82. As regards the development of additional functionalities/modules of DETA, the International Motor Vehicle Inspection Committee reconfirmed its readiness to finance the development of the module for Declaration of Conformity (DoC). The further development of the module for the Unique Identifier (UI), which was paused as an assessment of its general applicability for all of the UN Regulations, is ongoing. A potential optional approach is subject to ongoing discussions among contracting parties.

1997 Agreement

- 83. At its 191st session, WP.29 adopted the draft framework document on vehicle whole-life compliance, which provides for a compliance regime for vehicles from type-approval via periodic technical inspections, roadside technical inspections until its end-of-life and scrapping by applying a holistic approach.
- 84. WP.29 also adopted an amendment to Resolution R.E.6 (test equipment, skills and training of inspectors and supervision) introducing requirements for test equipment for particulate number counting. It established an amendment to UN Rule No. 1 (Protection of the Environment) introducing the particulate counting test as an alternative for diesel powered vehicles of emission levels 5/V and 6/VI. This new diesel emission test during periodic technical inspections would contribute to further protection of the environment.

1998 Agreement

- 85. In 2023, WP.29 concluded several years of work on a new UN Global Technical Regulations (UN GTR) and established UN GTR No. 24 on laboratory Measurements of Brake Emissions for Light-Duty Vehicles.
- 86. WP.29 established an amendment to UN GTR No. 13 (Hydrogen and Fuel Cell vehicles) and one amendment to Mutual Resolution No. 1 (M.R.1) on the description and performance of test tools and devices necessary for the assessment of compliance of wheeled vehicles, equipment and parts according to the technical prescriptions specified in UN Regulations and UN GTRs. This will adapt the UN GTRs to the most recent technological innovations and introduce more stringent requirements aimed at increasing both the safety and environmental performance of vehicles.

M. Working Party on Customs Questions affecting Transport (WP.30) and the TIR Administrative Committee (AC.2)

87. There was a major accomplishment for WP.30 and TIR Administrative Committee (AC.2) in 2023. The first ever eTIR transport was conducted after the entry into force, on 25 May 2021, of a package of amendment proposals introducing the computerized TIR procedure, known as the eTIR procedure, in the legal text of the TIR Convention, 1975 and new Annex 11.

- 88. The status regarding the interconnections of eTIR international system with the National Customs Systems stands is as follows:
- (a) Azerbaijan, Georgia, Pakistan, Tunisia and Uzbekistan have finalised the interconnection of their national customs systems with the eTIR international system,
- (b) IRU has finalised the interconnection of its information technology systems with the eTIR international system,
- (c) For Kazakhstan, Kyrgyzstan and Tajikistan, funds were made available by Regular programme of technical cooperation (RPTC) budget and national consultants have been hired and the interconnection projects have started,
- (d) Iran (Islamic Republic of) and Ukraine have expressed interest to interconnect to the system.
- 89. AC.2 noted that TIB had considered a proof of concept for the possible access of TIR transport data by holders via the web and mobile applications dedicated to holders. TIB felt that this question, since it requires changes to the eTIR concepts, should be first considered by the contracting parties to the TIR convention bound by Annex 11 in the framework of AC.2. The Chair of TIB invited AC.2 to provide its views on the issue. AC.2 decided to revert to this issue at its next session.
- 90. The twelfth revised version of the TIR Handbook, to be issued in 2024, is under preparation. TIRExB is in the process of drafting a set of new examples of best practices to add to the already existing set of examples. These examples refer to Explanatory Note 0.49 and comment thereto on the use of authorized consignor and consignee and to a comment on article 1 (o) on the use of subcontractors. On top of a PDF version, the secretariat intends to produce a more interactive, online version.
- 91. At its 164th session (October 2023), WP.30 considered Informal documents WP.30 (2023) 4, 5, 6, 7 and 8 containing the first 4 chapters and an annex of the publication prepared by the ECE secretariat, in collaboration with the Organization for Security and Co-operation in Europe (OSCE), "A practical guide to cross-border facilitation". The secretariat invited interested delegates to provide good practices and case studies for the publication to be issued in English, French and Russian towards the end of 2023.
- 92. At its 164th session (October 2023), WP.30 was briefed about the latest development in the implementation of a MoU between ECE and the Alliance Internationale de Tourisme / Federation Internationale de l'Automobile (AIT/FIA) on revitalising and digitalizing relevant United Nations inland transport conventions and, in particular, the development of an eCPD (Carnet de Passage en Douane) system. The secretariats had started preparing the concepts of the future system and would submit a document for consideration by WP.30 at one of its future sessions (ECE/TRANS/WP.30/328, paragraph 25).
- 93. Furthermore, at its 164th session (October 2023), WP.30 was also informed following a request from customs authorities and depending on the availability of extrabudgetary funds, that the secretariat with the assistance of the FIA secretariat would organize an informal ad hoc and online meeting to host the first session of the informal working group to digitalize the CPD. The first session of the informal group of experts on the digitalization of CPD took place on the 14 December 2023, online with the participation of many customs authorities and private sector associations / clubs of FIA Secretariat. The experts had the opportunity to discuss for first time all the issues related to the efficient digitalisation of CPDs including several improvements of the current procedure that might be included. The next session of the group will take place in March 2024.