



Economic Commission for Europe**Inland Transport Committee****Eighty-fifth session**

Geneva, 21-24 February 2023

Item 7 (g) of the provisional agenda

**Strategic Questions of a Horizontal and
Cross-Sectoral Policy or Regulatory Nature:
Analytical Work on Transport****Analytical work of the Sustainable Transport Division****Note by the secretariat***Summary*

This note summarizes the work undertaken in the framework of the Working Party on Transport Trends and Economics (WP.5), which serves as the transport think tank for the Inland Transport Committee (ITC). The note also provides a brief overview of the analytical work assumed in 2022 by the United Nations Economic Commission for Europe (ECE) Sustainable Transport Division. This work comprised preparation of publications on specific transport issues, analytical work conducted by specific Groups of Experts and Multidisciplinary Task Forces, analytical papers to support activities related to the United Nations transport conventions, capacity-building workshops, as well as the establishment of a transport corridor coordination management committee.

The Committee is invited to consider the information provided in this document. The Committee may also provide guidance as to the future directions for the analytical work in the field of transport.



I. Analytical work undertaken by the Working Party on Transport Trends and Economics



Source: Depositphotos 2022

1. The Working Party on Transport Trends and Economics (WP.5) provides an inter-regional forum for the exchange of experiences and ideas, in particular, on challenges relating to the development of sustainable inland transport systems. Its mandate allows it to assume the unique role of a transport “think tank” in the framework of the Inland Transport Committee (ITC).

2. Following the request of the ITC at its eighty-first session inviting its subsidiary bodies to take follow-up actions to align their work with the ITC Strategy until 2030 (ECE/TRANS/288, paras. 15 (a) and (c)) the WP.5 mandates and programme of work have been fully aligned with the priority actions of the Strategy included under the ITC’s fourth role as a “United Nations Platform for promoting sustainable regional and interregional inland transport connectivity and mobility”.

3. In view of its past activities, and considering the ITC Strategy until 2030, WP.5 at its thirty-second session in 2019 agreed on six key clusters of work and long-term (2020–2030) programme of work on the basis of which the present document has been structured:

- (a) Development of transport networks and/ or links;
- (b) Transport and climate change;
- (c) Sustainable urban mobility;
- (d) Transport infrastructure data;
- (e) Review and monitoring of emerging issues and Sustainable Development Goals; and
- (f) Inland transport security.

II. Overview of the Working Party on Transport Trends and Economics` activities per cluster

A. Development of transport networks and/ or links

Euro-Asian Transport Links operationalization



4. On 6 September 2022, in conjunction with the WP.5 thirty-fifth annual session, the ECE secretariat jointly with the Economic Cooperation Organization (ECO) secretariat co-organized a designated expert round table to discuss the operational rail capacity of the Trans-Caspian and Almaty-Istanbul corridors including the availability of reliable corridor wide agreed timetables and tariffs as well as en route border crossing point efficiency.

5. The expert round table gathered senior railway, transport, and customs officials from the following countries on both corridors: Azerbaijan, Georgia, the Islamic Republic of Iran, Kazakhstan, Türkiye and Uzbekistan. Based on document ECE/TRANS/WP.5/2022/1, prepared by the secretariat, the round table led to a prioritized list of actions to be taken in relation to the harmonization of existing tariffs, services and time schedules and already documented physical/non-physical challenges and bottlenecks. The document contains corridor specific data and information collected through a network of national railway, transport and customs focal points and provides an overview of trade and transport developments between Europe and Asia and their impact on the Trans-Caspian and Almaty-Istanbul corridors. It also provides a short analysis of the logistics performance of both corridors and a railway capacity assessment at an individual country level.



Source: Depositphotos 2022

6. The expert round table was divided into two interactive panel discussions. Panel I focused on defining “Concrete next steps towards reliable, corridor-wide timetables and tariffs”. Discussions centred around a series of guiding questions on which panellists were invited to exchange views, aiming at, among other things, identifying:

- (a) Key factors that slow down rail freight movements on both corridors, including at national, bilateral and/or international levels, i.e. due to:
 - (i) Shortcomings in infrastructure and/or rolling stock.
 - (ii) Operational limitations put in place (e.g. only nightly operations; priority given to passenger trains over freight trains, and lack of sidings etc.).
 - (iii) Insufficient quality of Internet Communication Technology connectivity.
 - (iv) Border crossing/transshipment inefficiencies.

(v) Lack of harmonized operating standards or procedures and lack of technical interoperable standards.

(b) Reasons for remaining discrepancies in freight rail transport costs among individual countries on the same corridor or segment thereof.

(c) Ways to strengthen use of the current network capacity for railway operations on both corridors.

(d) Key factors hampering the establishment of a corridor-wide established timetable and tariff.

(e) Opportunities to enhance the trust of the market in the corridor services under discussion.

7. Panel II focused on concrete next steps towards efficient, harmonized en route border crossing and customs services. Discussions centred around guiding questions on which panellists were invited to exchange views, aimed at identifying main bottlenecks at rail freight border crossing points or transshipment points of international significance and solutions that are being deployed.

8. In this regard, participants took stock of:

- The availability or lack thereof of information exchange/delegation of authority mechanisms among different control agencies both domestically and bilaterally.
- The use of digitalized transport and customs documents in cross-border rail freight operations.
- The use of new technologies and non-intrusive inspection methods.
- The availability of joint control facilities involving officials from various agencies and from both sides of the border conducting inspections together.
- The implementation levels of special arrangements surrounding rail freight transit e.g. based on advance information from the country of origin and/or destination and the availability of border crossing facilitation measures specifically for container block trains.
- The use of electronic information systems for sharing information; railways to railways electronic data interchange (EDI); Standardization and harmonization of data requirements; rail transport Single Window facility/system etc.

9. Participants in the round table thanked ECE and ECO secretariats for organizing the round table and indicated their interest to continue such targeted discussions, at regular intervals, in the framework of a newly established corridor coordination committee. It was stressed that such effort, co-facilitated by ECE and ECO under the auspices of WP.5, should aim at: (a) offering a platform for stronger coordination and combined efforts at corridor-wide level, (b) more effectively addressing remaining technical obstacles, and (c) enhancing rail freight volumes and better use of the available capacity on both corridors. The Chair and the secretariat expressed their readiness to set up such a committee and to continue hosting, result-oriented consultations with the governments involved as well as private sector operators from across the region.

10. WP.5 noted with appreciation the targeted discussions that took place at the round table organized by the ECE and ECO secretariats aimed at discussing the operational rail capacity of the Trans-Caspian and Almaty-Istanbul corridors. It welcomed the request of participating railway companies and customs administrations from countries on both corridors to establish a coordination committee that would gather periodically in the format of a Group of Friends of the WP.5 Chair co-facilitated with the ECO secretariat to exchange views and information on inter alia the following issues: Remaining technical interoperability issues, the establishment of a unified time schedule and tariffs for both corridors; the development of a marketing plan for the corridor which could serve as a basis to attract higher interest levels from private sector operators and freight forwarders as well as to boost digitalization efforts of transport and customs documents. WP.5 requested the countries

concerned and the secretariat to prepare an update report ahead of its annual session in September 2023.

11. On 16 December 2022, in a follow-up to the above decision, the ECE and ECO secretariats hosted the first meeting of the newly established ECO/UNECE Coordination Committee on the Trans-Caspian and Almaty-Istanbul Corridors which was held in hybrid format and benefited from a strong participation by the International Federation of Freight Forwarders Associations (FIATA) and its national associations from across the region. Participants provided inputs to the development of a corridor specific work plan and marketing strategy. Further meetings of the coordination committee will take place in 2023.

B. Transport and climate change

1. Climate change adaptation efforts in inland transport

12. A Group of Experts on Assessment of Climate Change Impacts and Adaptation for Inland Transport (GE.4) 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 adaptation 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.

13. During 2022 the Group of Experts continued to discuss weather phenomena thresholds which should be analysed on how these thresholds change, especially temperature and precipitation but also wind gust, to help transport professionals understand whether transport infrastructure standards need to change. The Group agreed to develop a framework for stress testing transport asset to climate change hazard, and a guidance on network criticality assessment and started developing them. It also started work on guidance for adaptation pathways in transport sector. The Group continued to work on rising awareness about the urgency of adapting transport to climate change. In this regard, preparations started for a workshop for all the countries in the Mediterranean region to be held in the second quarter of 2023. This workshop will be held in collaboration with ESCWA, France and other partners.

Map I

E-waterways network and maximum precipitation amounts over average five-day period



Map II

The E-railway network and the annual count of days when daily precipitation amounts are greater than 20 mm**2. Climate change mitigation efforts in inland transport**

14. In response to a request of ITC at its eighty-fourth session, WP.5 reviewed document ECE/TRANS/WP.5/2022/5 titled “Accelerating the inland transport sector’s climate change mitigation measures - lessons learned from the aviation and maritime sectors” as prepared by Birmingham University. The document provides a comprehensive overview of what the aviation and maritime transport sectors are doing in reducing their environmental footprint and provides several recommendations on how to increase the role of the Committee and its subsidiary bodies in this area. Document ECE/TRANS/WP.5/2022/5 has subsequently been submitted as a WP.5 analytical input to document ECE/TRANS/2023/21 titled “Climate change mitigation in inland transport at an inflection point: the way forward” tabled for consideration at the ITC eighty-fifth session.

C. Sustainable urban mobility, cycling and public transport**1. Interregional workshop on electrification of urban mobility – opportunities and challenges for transport, energy, and spatial planning**

15. On 5 September 2022, further to a request of WP.5 at its thirty-fourth session inviting the secretariat to continue holding and facilitating interregional transport consultations on targeted topics of interest, an interregional workshop on “electrification of urban mobility – opportunities and challenges for transport, energy and spatial planning” was organized as part of the WP.5 cluster of work on “sustainable urban mobility, public transport, and cycling”. At ECE, the workshop was co-organized by the Sustainable Transport Division, the Sustainable Energy Division and the Housing and Land Management Section. It was co-hosted by all five United Nations regional commissions: ESCAP, ECE, ECLAC, ECA, and ESCWA.



Source: Depositphotos 2022

16. The workshop provided a comprehensive platform for representatives of city and urban transport authorities, grid managers as well as spatial planners, Ministry of Transport/Mobility experts, NGOs and academia from around the world to exchange views on trends, opportunities and challenges in the field of electrification of road vehicles at urban, suburban, and regional levels. Participants also discussed the policy and infrastructure needs that these developments create for transport, energy, and spatial planning, inter alia in an urban environment.

17. Participants in the workshop agreed on the high relevance of several related aspects, including:

(a) The need to develop a deeper understanding of e-mobility of road vehicles and its consequences for and interaction with the electricity grid.

(b) The significant role of developing sound regulatory frameworks surrounding e-mobility of road vehicles combined with effective implementation of medium to long-term strategies, policies and practices aimed at accelerating the transition to e-mobility in road transport, in particular in an urban and suburban context.

(c) The importance of adapting existing transport infrastructure and spatial planning approaches to arising e-mobility requirements. In this regard, agreement was reached on the significance of accommodating new types of Electric Vehicle (EV) smart charging solutions in cities and regions both for passenger and public transport vehicles (including among others: wireless electric vehicle charging/inductive charging; pop-up pavement chargers; innovative use of existing roadside infrastructure, “charging on the go”, etc.).

(d) The need to also consider e-mobility solutions and requirements for urban and long-distance road freight transport including for commercial electrical vehicles, eLight Duty Vehicles (eLDV) and eHeavy Duty Vehicles (eHDV) and their charging infrastructure. Regarding the latter, participants agreed on the pivotal role that regional central freight consolidation centres could play in providing a gateway to urban and long-distance freight transport electrification.

(e) The importance to continue work on regulatory tools for standardized communication between charging infrastructure and vehicles and electric vehicle supply equipment (EVSE) (de jure) standards and other related standards and/or protocols.

18. WP.5 welcomed the interregional consultations that were held on electrification of urban mobility and invited the secretariat to continue holding and facilitating such consultations on targeted topics of interregional interest, in cooperation, if possible, with the other United Nations regional commissions as well as other regional / interregional organizations and relevant projects. The proceedings of the workshop, presentations and all workshop materials are available at: <https://unece.org/transport/events/wp5-working-party-transport-trends-and-economics-35th-session>.

2. Group of Experts on Cycling Infrastructure Module

19. 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. A second GE.5 tasks involves the elaboration of common definitions for various types of cycling infrastructure as well as new road signs for signposting the cycling routes.

20. In June and November 2022, the Group held its first two sessions and started work on a draft guide for designating national cycling network. This guide will contain and explain recommended steps for the designation of national cycling networks, which could be applied by countries which neither have procedure in place nor experience in designating cycling networks. In this regard, the Group also started elaboration of a discussion paper on the cycling route various parameters and usage categories (e.g. children vs experienced cyclists). The Group is also working to make proposals for revising set of definitions including: (i) the definition of cycle in view of new types of cycles including but not limited to: pedelec, speed pedelec or cargo cycle, and (ii) provisions for markings for cyclists, in particular markings for preselection of lanes and arrow markings as well as provisions for traffic light signals for cyclists as included in the 1968 Convention on Road Signs and Signals and related instruments with the view to understand if these provisions should be streamlined or updated. The Group has been also working to setting up common definitions for different types of cycling infrastructure including the elaboration of definitions for types of infrastructure such as e.g. cycle street, street with counterflow cycling, cycle crossing, bike box, cycle highway, advisory lanes for cyclists, cycle parking and others.

21. When working on the definitions, the Group of Experts is reviewing the practices from various ECE member States. Examples of light signals for pedestrians and cyclists as well as traffic signs and markings for showing different lane selection for different groups of users are illustrated in figures 1-3 below.

Figure 1

Common traffic light signals for pedestrians and cyclists. From left to right: Belgium, Hungary, Poland and Spain



Source: Aleksander Buczyński/ ECF

Figure 2

Example of different lane selection for different groups of users: busses are allowed to go straight from the right-turning lane, because of a bus-and-cycle lane starting after the intersection



Source: Aleksander Buczyński

Figure 3

Example of a right-turn lane where cyclists are allowed to go straight because of a cycle lane starting after the intersection. Budapest, Hungary



Source: Aleksander Buczyński

D. Transport infrastructure data

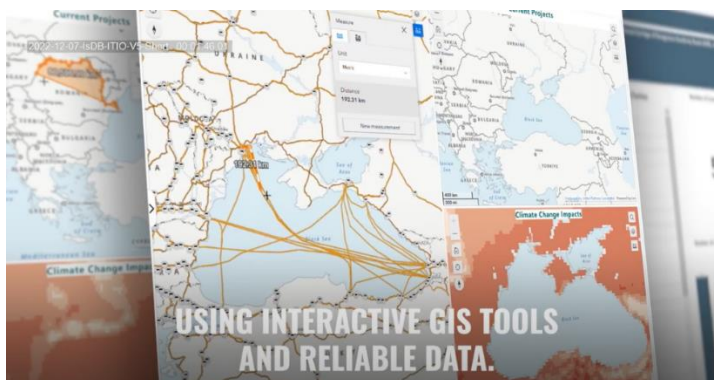
1. International Transport Infrastructure Observatory



Source: IsDB/ECE promotion material

22. On 6 September 2022, in Geneva, in conjunction with the WP.5 thirty-fifth annual session, the ECE secretariat, jointly with the secretariats of ESCWA, Islamic Development Bank (IsDB), ECO, and the Centre for Transportation Studies for the Western Mediterranean (CETMO), held an inaugural launch meeting of the Geographical Information System (GIS) based International Transport Infrastructure Observatory (ITIO). On this occasion the secretariat provided a live demonstration of the various functionalities ITIO offers.

23. WP.5 appreciated the inaugural meeting of the International Transport Infrastructure Observatory and welcomed the finalization of the platform after several years of combined efforts among ECE, IsDB, ESCWA, CETMO and ECO and called upon governments that had not yet done so to appoint national focal points and start exploring its functionalities, provide feedback on their user experience and start feeding it with additional geocoded data. It also requested the secretariat to inform the ITC Bureau and the Committee on the development of ITIO and possible outcomes of the tests once they are completed.



Source: IsDB/ECE promotion material

24. By December 2022, a group of about twenty Governments and seven regional organizations and multilateral development banks had nominated a national focal point to start using ITIO in a test phase. Document ECE/TRANS/WP.5/2022/3 prepared by the secretariat contains a questionnaire based on which ITIO users have been invited to provide written feedback on their user experience, identify areas for improvement and define additional features to be developed. The document also contains a technical user manual, including guidelines on how to edit existing data on infrastructure networks on the GIS platform.

25. In December 2022, the ECE secretariat jointly with IsDB developed an ITIO promotion video which will be broadly disseminated among governments and multilateral development banks aimed at further strengthening the awareness about ITIO and what it has to offer.

2. Benchmarking Transport Infrastructure Construction Costs

26. 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.



Source: Depositphotos 2022

27. WP.5 adopted the final report and requested the WP.5 secretariat to explore avenues to continue these benchmarking efforts, including on maintenance costs of transport infrastructure, in the framework of the Trans-European Motorways (TEM) and Trans-European Railways (TER) projects. The secretariat was also requested to explore possibilities to upload the GE.4 analysis and data findings onto ITIO and to create, as part of ITIO, automated dashboards that would allow governments in a secure Information Technology (IT) environment, to continue sharing information about transport infrastructure costs. WP.5 requested the secretariat to officially publish the GE.4 final report as a United Nations publication in the three ECE working languages. The publication will be issued in spring 2023.

E. Review and monitoring of emerging issues and sustainable development goals



1. Follow-up to the Informal Multidisciplinary Advisory Group on Transport Responses to COVID-19 – Development of a concept on international contingency management

28. In response to a request received by WP.5 at its thirty-fourth session (September 2021) the secretariat ahead of the WP.5 thirty-fifth session prepared an official document providing: (a) an overview of all recommendations developed by the Informal Multidisciplinary Advisory Group (IMAG) over the period 2020–2021, as well as an action plan for their implementation; and (b) a concept note for further information exchange and possible contingency planning for rail, road and inland waterways. WP.5, at its thirty-fifth session, appreciated document ECE/TRANS/WP.5/2022/4 as well as the proposed action plan for its implementation and requested the secretariat to follow up on this. WP.5 welcomed the proposal by the secretariat inviting interested countries to participate on a voluntary basis in a pilot project aimed at developing an international contingency management system for road, rail, or inland waterways (IWW) on a specific corridor or segment thereof. This activity will be launched in 2023 and is funded through an extra-budgetary project titled “Building resilient, climate adaptive and economically viable transport infrastructure networks”.

2. Use of the Sustainable Inland Transport Connectivity Indicators

Figure 4

SITCIN user platform available at <https://SITCIN.org>



29. The thirty-fourth session of WP.5 featured the launch of a set of 215 Sustainable Inland Transport Connectivity Indicators (SITCIN) which have been developed in the framework of a United Nations Development Account (UNDA) project entitled “Sustainable transport connectivity and implementation of transport related Sustainable Development Goals in selected landlocked and transit/bridging countries” implemented by ECE in cooperation with ECLAC and ESCWA.

30. The main objective of the indicators, which have been tested and validated in five pilot countries, (including Georgia, Jordan, Kazakhstan, Paraguay, and Serbia) is to offer a tool to governments to measure and qualify their degree of transport connectivity, both domestically and bilaterally/subregionally as well as in terms of soft and hard infrastructure. The indicators also offer governments the possibility to measure the extent to which they implement the relevant United Nations legal instruments, agreements, and conventions and the degree to which their inland transport systems are inter-operable with the systems within their respective subregions.

31. In order to promote the use of the SITCIN assessment and make it as user-friendly and accessible as possible, an automated SITCIN user and data collection platform as well

as an interactive e-learning course on how to use the indicators have been developed and are available at: <https://SITCIN.org>.

3. Launch of the ECE Inland Transport and Trade Connectivity eLearning Platform

Figure 5

Homepage of the LearnITC eLearning platform available at <https://learnitc.unece.org>



32. In conjunction with the WP.5 thirty-fifth session, the ECE LearnITC eLearning platform has been launched. The aim of the platform is to support the development of sustainable mobility and smart connectivity around the world, and particularly in Central Asia, the Caucasus and Western Balkans. It aims to develop the capacity of member States to implement sustainable mobility and connectivity policies, which are important factors in achieving the Sustainable Development Goals. Specifically, the project focuses on increasing the knowledge base and skills of institutional and sectoral stakeholders in relation to United Nations Inland Transport Legal Agreements and Conventions as well as trade facilitation principles.

Figure: 5

The LearnITC platform covers six thematic areas



33. The eLearning platform is available for free in English, French and Russian. The training materials and online courses are provided on the below six thematic areas. The courses mainly target government-related stakeholders, but are open to any interested persons, including from private sector and academia.

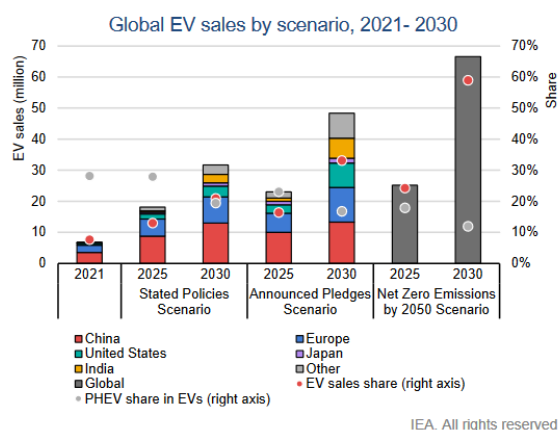
- (a) Introduction to the Inland Transport Committee
- (b) Vehicle Regulations, Innovations, and Road Traffic Safety
- (c) Transport of Dangerous Goods
- (d) Transport Networks and Logistics
- (e) Transport Facilitation and Economics
- (f) Trade Facilitation Implementation Guide (TFIG)

4. Taking stock of new trends towards electric vehicle charging infrastructure

34. ITC at its eighty-fourth annual session in February 2022 requested WP.5 “to take into consideration the new trend towards electric charging infrastructure and, in coordination with the chairs of the relevant working parties, to prepare a first assessment of issues that need addressing in the realm of the Committee to be presented at its eighty-fifth session”.

35. In response to this request document ECE/TRANS/2023/23 titled “Taking stock of new trends towards electrical vehicle charging infrastructure” was prepared providing an overview of preliminary ideas for a stronger role by the ITC and its subsidiary bodies. Given its inter-disciplinary scope, this document has been prepared jointly by the ECE Sustainable Transport and Sustainable Energy Divisions and has been submitted to WP.5 for consideration at its thirty-fifth annual session (September 2022). It has also been presented to the Working Party on Road Transport (SC.1), the Working Party on Intermodal Transport and Logistics (WP.24) and the Informal ECE Working Group on Electric Vehicles and Environment (EVE/WP.29) as well as to the ITC Bureau at its session in November 2022. Feedback received has been included in the present version of the document.

36. Inter alia, the report identifies that by 2030 it is expected that there will be 65 million electric vehicles (EVs) on the road and by 2035, 130 million EVs. The report also explains that while at present there are some 374,000 public charge points in Europe the expected in EVs implies that there will need to be an up take of 13 million of such charge points (by 2025) and of 65 million by 2035 (for 130 million EVs). The report further explains that based on the IEA Mobility Model it was calculated, that in 2020, the global EV fleet consumed around one per cent of global electricity demand and that based on the same model it is forecasted that by 2030 this will increase to two per cent.



Source: IEA 2022

37. The report recognizes that while this is only a limited increase in electricity consumption by EVs, smart charging solutions will need to be put in place to ensure that the EV electricity demand increase is not limited by grid capacity and does not occur during electricity peak demand times. In this regard the report refers to measures that allow a better integration of the EV charging process into the broader electricity network whereby cars could be used as mobile electricity storage units including in a Vehicle-To-Grid (V2G) Vehicle-To-Home (V2H) setting. Additional messages that are highlighted in the report include the need for different charger types to be made available at sufficient and affordable levels and the need for continuous technological innovations in battery development (batteries need to have a higher and longer capacity/need to be more weather cold/heat resistant etc.). Also, the need to put in place standardized and harmonized e-charging protocols and standards enabling seamless communication among charging systems and vehicles as well as the broader is emphasised. Finally, the report underlines the need to introduce innovative charging solutions, including systems enabling wireless EV charging or pop-up pavement chargers or to make use of already existing road furniture or telecommunications infrastructure (even light posts) which could be transformed into charging units.



Source: Depositphotos 2019

38. The report lays out specific roles for the following ITC subsidiary bodies:

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

39. WP.5 at its thirty-fifth annual session decided that it would introduce a steady workflow on general trends and developments surrounding passenger electric vehicles (EVs) and its charging infrastructure. In this regard, WP.5 plans to biennially take stock of latest developments in this field and in passenger road transport in general. As appropriate, it plans to organize targeted workshops and/or prepare assessment reports and issue recommendations on these topics. As an immediate first step, it decided to prepare its Transport Trends and Economics 2022–2023 publication to explore this theme further.

40. WP.5 also decided to organize, as part of its cluster of work on transport security a designated workshop on security aspects of EVCS, both in terms of cyber security threats, as well as physical security of users during the charging process. Such a workshop will be held at its next session in 2023, possibly in cooperation with the Working Party on Road Transport (SC.1) or the Informal Working Group on Intelligent Transport Systems under the World Forum for Harmonization of Vehicle Regulations (WP.29).

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

41. WP.24 at its sixty-fifth session decided to consider as part of its work scope the developments for commercial EV fleets including eLDV and eHDV and their charging infrastructure in the context of intermodal transport. It agreed to look at what could be a role played by intermodal terminals in providing charging infrastructure to eLDV used for last mile deliveries, i.e. from the intermodal terminal to the customer.

(c) *Working Party on Transport Statistics (WP.6)*

42. WP.6 at its seventy-third session introduced a discussion around certain aspects of vehicle statistics, including emissions from electric vehicles depending on the time that they are charged (and the policy implications this has), the number and capacity of vehicle charging stations, as well as statistics on the trade in used vehicles. WP.6 stands ready to consider data collection on EVs and EV supply equipment (EVSE) by developing, where required, data definitions and by setting up a specific data collection mechanism on public charging infrastructure points.

43. Furthermore, the report recommends that ITC may wish to:

(a) Invite WP.29 to make proposals on possible future activities on regulatory tools for harmonized communication between vehicles and EVSE, taking into consideration already existing related standards and/ or protocols.

(b) Invite SC.1 to consider and make proposals on road transport developments in view of the electrification of LDV and HDV and how to best arrange the development of charging infrastructure. SC.1 is further invited to closely collaborate with WP.24 to find solutions serving best the transport haulage in general as well as the last mile deliveries.

(c) To consider engaging more closely with its sister ECE Committee on Sustainable Energy on these matters, and if deemed appropriate, take a decision on what form such cooperation could take.

(d) To request WP.5 to continue playing a coordinating role and report back to ITC at its next session.

F. Inland transport security



Source: Depositphotos 2022

44. A roundtable on “Protection of transport infrastructure at the stages of design, construction and operation” was held under this agenda item in the framework of the annual 2022 ECE Inland Transport Security Forum. The event featured keynote speakers from a variety of stakeholders including from the United Nations Global Programme on Countering Terrorist Threats against Vulnerable Targets at the United Nations Office of Counter-Terrorism; Proactima, a Norway-based advisory firm; as well as relevant authorities in the Russian Federation and Türkiye.

45. Panellists and participants took stock of the security threats to critical inland transport infrastructure at the stages of planning, design, and operation and identified possible policies and approaches that can help to address these challenges most effectively. In this regard, participants learnt about the content and scope of application of relevant United Nations Security Council resolutions, in particular No. 2341 (2017) and No. 2396 (2017), and were informed about the availability of thematic training modules on the protection of vulnerable targets and terrorist threats based on which capacity-building is provided to member States. Participants also benefited from the national examples provided by the speakers of the Russian Federation and Türkiye, stressing the importance of developing a strong regulatory and legal framework surrounding security of transport infrastructure on the one hand and providing a broad range of practical measures that need to be put in place and observed during the design, construction, and operation phases of critical transport infrastructure on the other hand. In conclusion, participants agreed that countries should define what constitutes critical infrastructure and “soft” targets in their national context and based on that develop a national strategy to protect critical transport infrastructure from security risks, including cyber threats. In this regard, participants recognized the need for using a risk-based approach and the development of a common assessment methodology, including through setting up multi-agency and inter-agency structures and cooperation mechanisms required to ensure that security aspects are understood and implemented in a consistent manner.

46. The concept note, programme and full set of presentations delivered at the workshop are available at: <https://unece.org/transport/events/wp5-working-party-transport-trends-and-economics-35th-session>.

III. Analytical work: publications by the Working Party on Transport Trends and Economics

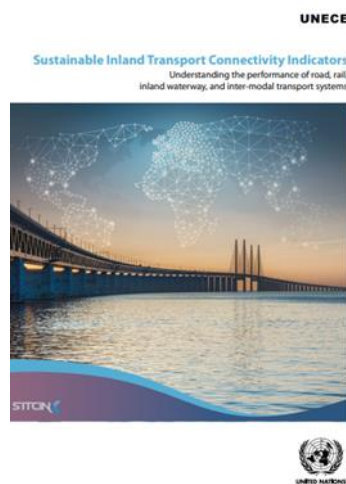
Sustainable Inland Transport Connectivity Indicators – Understanding the performance of road, rail, inland waterway, and intermodal transport systems (October 2022)

47. ECE with the support of ECLAC and ESCWA developed a comprehensive set of Sustainable Inland Transport Connectivity Indicators (SITCIN) in the framework of a United Nations Development Account (UNDA)-funded project. SITCIN is an analytical tool to enable countries to measure their degree of transport connectivity, both domestically and bilaterally/subregionally, as well as in terms of soft and hard infrastructure.

48. It has been designed to enable governments to evaluate and assess the following:

- (a) Their progress towards achieving the transport-related Sustainable Development Goals;
- (b) Their commitments under the Vienna Programme of Action for Landlocked Developing Countries (LLDCs) for the decade 2014-2024;
- (c) The effectiveness and efficiency of their transport systems and degree of interoperability with those of adjacent countries;
- (d) The level of compliance of national administrative and legal frameworks with United Nations legal instruments relating to transport and border-crossing facilitation.

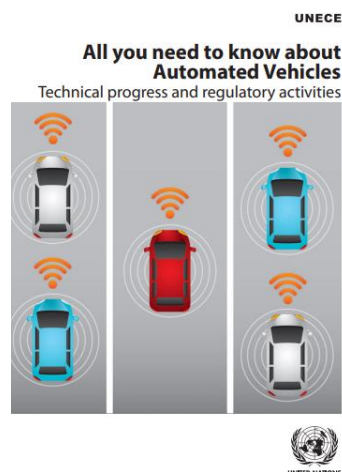
49. This publication covers all the project phases, which include the development of 215 indicators, the methodology used, the testing and validation phase in five pilot countries, and the development of the SITCIN user platform and the e-learning course. It is available at: <https://unece.org/info/Transport/pub/371986>.



IV. Analytical work: publications by the Economic Commission for Europe Sustainable Transport Division

A. All you need to know about Automated Vehicles – Technical progress and regulatory activities (January 2022)

50. This brochure provides an overview of technological developments in the field of assisted and automated driving systems and describes the role of the World Forum for Harmonization of Vehicle Regulations (WP.29) and other regulatory bodies. It further includes a short section aimed at addressing various myths surrounding assisted and automated driving. The publication is available at: <https://unece.org/info/publications/pub/364076>.



B. River Information Services in the region of the Economic Commission for Europe (March 2022)

51. This publication introduces and explains the concept of River Information Services (RIS) on European inland waterways. It highlights the RIS objectives, basic components, functions and key stakeholders. Focus is made on the international regulatory basis, the ECE strategic framework in this field and expected trends in the further development of RIS. The publication is available here: https://unece.org/sites/default/files/2022-03/2113727_E_final_WEB.pdf



C. Road map for accession to and implementation of the agreement concerning the International Carriage of Dangerous Goods by Road (November 2022)

52. The Road Map for access to and implementation of the agreement concerning the International Carriage of Dangerous Goods by Road contains information for experts and legal advisers in transport ministries and departments, as well as for other relevant ministries (e.g. environment, interior, foreign affairs), presidential administrations and national parliaments in countries interested in becoming contracting parties to ADR. It also aims at providing useful guiding to the contracting parties to ADR during the implementation process.



D. Railways at the centre of post-pandemic recovery measures to support international rail carriers (November 2022)

53. The COVID-19 pandemic has had a significant impact on all aspects of transport across the pan-European region for both the passenger and freight sectors with borders being closed temporarily and consecutive lockdowns limiting movements. The rail sector, which in recent years had been experiencing growth across all areas, was particularly hit hard. Passengers all but stopped travelling and freight was, in some areas, reduced dramatically. Given this background, and with the gradual reduction in limitations in 2021, the Working Party on Rail Transport (SC.2) decided to dedicate a workshop on “Railways at the centre of the post-pandemic recovery – Connectivity through the railways”, held on 17 November 2021. The Working Party agreed that a follow-up publication should be prepared building on discussions at this workshop. This publication provides: (Chapter I), a summary of the impact of the pandemic on the rail sector as well as a summary of discussions at the workshop; (Chapter II) a review of the incentives provided by national governments to the sector, and; (Chapter III) conclusions for further discussion. This publication is available at: https://unece.org/sites/default/files/2022-11/2214280_E_final_web.pdf.



V. Conclusions

54. Publications produced by the Division in 2022:
- “All you need to know about Automated Vehicles – Technical progress and regulatory activities” (ECE, January 2022)
 - “River Information Services in the region of the Economic Commission for Europe” (ECE, March 2022)
 - “Road map for accession to and implementation of the agreement concerning the International Carriage of Dangerous Goods by Road” (ECE, November 2022)
 - “Sustainable Inland Transport Connectivity Indicators – Understanding the performance of road, rail, inland waterway and intermodal transport systems” (ECE, October 2022)
 - “Railways at the centre of post-pandemic recovery measures to support international rail carriers” (ECE, November 2022)
55. Important analytical outputs are under development in Groups of Experts operating under WP.5 auspices:
- Group of Experts on Assessment of Climate Change Impacts and Adaptation for Inland Transport (WP.5/GE.3)
 - Group of Experts on Benchmarking Transport Infrastructure Construction Costs (WP.5/GE.4) – mandate completed – final report will be issued as a United Nations publication in 2023
 - Group of Experts on Cycling Infrastructure Module (WP.5/GE.5)
 - Coordination Committee on the Trans-Caspian and Almaty-Istanbul Corridors/ Group of Friends of the Chair of the Working Party on Transport Trends and Economics (co-facilitated with ECO)
56. New, WP.5 coordinated work streams that require guidance by ITC:

- Working document: “Taking stock of new trends towards electrical vehicle charging infrastructure” (ECE/TRANS/2023/23) which provides a number of concrete recommendations for further action by the Committee and its subsidiary bodies.
- Working document: “Climate change mitigation in inland transport at an inflection point: the way forward” ECE/TRANS/2023/21 which received analytical inputs from WP.5 providing a detailed overview of what the aviation and maritime transport sectors are doing in reducing their environmental footprint and lessons learned for the inland transport sector.

57. ITC may provide guidance as to the future directions for the analytical work conducted by WP.5 in the field of transport.
