



INLAND TRANSPORT COMMITTEE



# Report on the 2019 activities of the Working Party on Transport Trends and Economics (WP.5)

82nd Annual Session of Inland transport Committee  
Geneva, 25-28 February 2020

Piet de Wildt (Chair), Netherlands

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- Climate Change Impacts and Adaptation for Transport Networks and Nodes
- Benchmarking Transport Infrastructure Construction Costs
- Progress in establishing ECE-led Transport Infrastructure Observatory
- THE PEP Pan-European Cycling Master Plan
- Transport Trends and Economics 2018-19: Mobility as a Service
- Support to countries in achieving the inland transport-related SDGs
- Operationalization of Euro-Asian Transport Links
- United Nations Development Account's project on developing a set of Sustainable Inland Transport Connectivity Indicators (SITCIN)
- A handbook on good practices and case studies in the field of sustainable transport and urban planning
- Other activities

## Climate Change Impacts and Adaptation for Transport Networks and Nodes



## Climate Change Impacts and Adaptation for Transport Networks and Nodes

Output – report

Way forward – continuation of work:  
establishment of the Group of Experts on  
assessment of climate change impacts and  
adaptation for inland transport

*Mandate and ToR (separate presentation)*



International Conference "Raising awareness on adaptation of transport infrastructure to climate change impacts"

*Athens, Greece, on 18-19 November 2019*

*Organized with Hellenic Logistics Association with support from the Netherlands*

## Benchmarking Transport Infrastructure Construction Costs

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**Mandate: ITC at its eighty-first session (February 2019) extended mandate of GE.4 until June 2020**

Current work of the Group of Experts:

- a) Analysis of received information on models, methodologies, tools and good practices for evaluating, calculating and analysing inland transport Infrastructure costs
- b) Finalization of a list of terminologies used for costing inland transport Infrastructure
- c) Analysis of received data for benchmarking inland transport construction costs

Please provide data on road construction projects between 2007-2016, costs should exclude design costs, land acquisition costs and value added cost

Project	Year	Year	Construction cost (million USD)	Country	Phase/Year	Project type	Construction type	Surface type	Number of lanes	Length of the project (km)	Number of lanes	Length of the project (km)	Number of lanes	Length of the project (km)	Number of lanes	Length of the project (km)	Number of lanes	Length of the project (km)	Number of lanes	Length of the project (km)
Al-Sarawia - Dajana	2006	2008	145,965,000	IR	2007	HCR Motorways Expressways	New Construction	Asphalt	3	12.9	0	0	0	2	0.3	7,825,000	13.2			
Al-Lajon - Raia	2006	2008	242,935,000	IR	2007	HCR Motorways Expressways	New Construction	Asphalt	3	25.2	0	0	0	5	16	26,460,000	26.8			
Al-Raia - Pida - Kasanazi	2006	2010	568,895,000	IR	2008	HCR Motorways Expressways	New Construction	Asphalt	3	18	7	3.8	87,435,000	11	4.5	81,520,000	26.3			
Link road/Karamati - Pida Port	2007	2017	197,510,000	IR	2007	HCR Motorways Expressways	New Construction	Asphalt	3	7.2	3	1.1	30,390,000	5	14	53,355,000	9.7			
Link road and Tunnel Su Wa	2008	2010	97,985,000	IR	2008	MCR Primary Roads	New Construction	Asphalt	2	7.2	3	1.1	30,390,000	5	14	53,355,000	9.7			
AS Oshak - Saloon	2007	2009	395,730,000	IR	2007	MCR Primary Roads	New Construction	Asphalt	1	4.7	1	4.3	48,335,000	0	0	0	0	0	0	0
AS Endiso - Sedanci	2006	2007	192,285,000	IR	2007	HCR Motorways Expressways	New Construction	Asphalt	3	31.7	0	0	0	11	0.9	47,710,000	32.6			
AS Swidongarica BH	2011	2015	23,680,000	IR	2007	HCR Motorways Expressways	New Construction	Asphalt	3	21.9	0	0	0	8	1.1	41,685,000	23			
AD Granica BH - Melouat - Pida	2011	2013	71,915,000	IR	2011	HCR Motorways Expressways	New Construction	Asphalt	3	3.2	0	0	0	2	0.9	33,055,000	9.9			
AD Jabulovac - Valla Gocica	2008	2015	192,670,000	IR	2007	HCR Motorways Expressways	New Construction	Asphalt	3	8.5	0	0	0	2	0.8	12,435,000	9.1			
AD Valla Gocica - Lelank	2007	2015	239,545,000	IR	2007	HCR Motorways Expressways	New Construction	Asphalt	3	9	0	0	0	2	0.9	33,055,000	9.9			
										19.5	0	0	0	8	0.8	9,300,000	20.1			

*Challenge: Limited inputs on (a) and (b) from UNECE member countries*

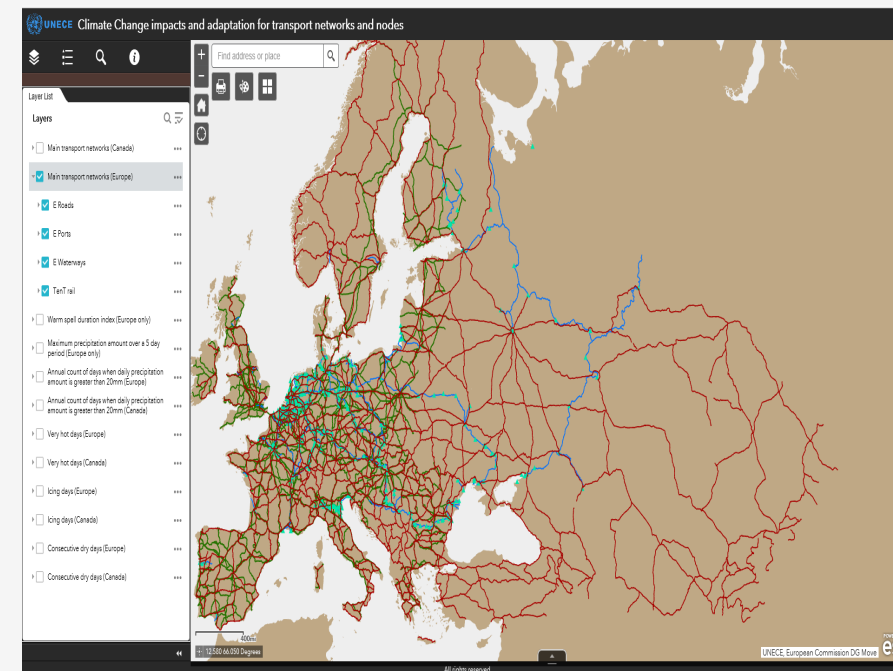


## Progress in establishing ECE-led Transport Infrastructure Observatory

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- Continuous cross-sectoral effort
- The work of the “Groups of Experts on Climate Change Impacts and Adaptation for Transport Networks and Nodes” and on “Benchmarking of Construction Costs” feed data into the Observatory
- The GIS project with ECO and IsDB is reaching its concluding phase, final workshop will be held in Istanbul (May 2020) consolidating all data received
- ICT expert will turn data into GIS shapefiles to populate the Observatory and create detailed maps



## THE PEP Pan-European Cycling Master Plan

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- Delays in preparing the Plan
- Challenge faced:
  - Very little data and information obtained from countries through a dedicated questionnaire
  - Limited resources in the secretariat further delay collection of data and information through a desk study

## Transport Trends and Economics 2018-19: Mobility as a Service



- Explains the MaaS concept
- Discusses enablers: digital enablers, car-sharing, bike sharing
- Discusses challenges: MaaS cost, risk revenue challenge, infrastructure challenge
- Conclusions and recommendations

Enablers

Challenges



## Transport Trends and Economics 2018-19: Mobility as a Service



### Credit to:




- Dimitris Dimitriou (Prof Associate, Dr.) and Ms. Maria Sartzetaki (Dr.) (University of Thrace, Greece) – parts of Chapter 1
- Athena Roumboutsos (Prof., Dr., Dipl. Eng.), together with Amalia Polydoropoulou (Prof., Dr., Dipl. Eng.), Ioanna Pagoni (Dr., Dipl. Eng.), and Athena Tsimipa (Dr.) (University of the Aegean, Greece) – parts of Chapters 1 and Chapter 5
- Stefanie Pichler (Fluidtime) – parts of Chapter 1 and Chapter 2
- Juhi Verma and Dr Claire Gregory with the team of Department for Transport (Department for Transport, UK – Chapter 3
- Manuel Marsilio (CONEBI and WBIA) – Chapter 4
- Andrzej Maciejewski – Chapter 6



## Support to countries in achieving the inland transport-related SDGs

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Sustainable Development Goals	ECE Body	Regulatory Work	Capacity Building	Analytical Work	Contributions
 1 NO POVERTY	WP.5		✓	✓	Serves as a pan-European Forum for exchange of information about the main inland transport trends and developments in the ECE region. It analyses latest trends, develops knowledge products, explores new approaches and promotes good practices from across the ECE member States. Produces knowledge materials on inter-linkages between transport and sustainable development, with a specific focus on the inland transport sector. Among others, it produces knowledge material on how to improve transport accessibility, and hence ensure that citizens can have an improved access to markets, including to labour or education markets.
 2 ZERO HUNGER	WP.5 WP.11		✓	✓	Produce knowledge material on improving access to markets by citizens and freight, hence, ensuring that food products can be transported and be accessible.
 3 GOOD HEALTH AND WELL-BEING	WP.1	✓	✓	✓	Operates as permanent global UN body focusing on road safety and serves as guardian of several UN Road Safety Conventions aimed at harmonizing traffic rules, road signs and signals as well as other road safety legal instruments. It develops and updates the Conventions under its purview, elaborates policy assessment tools and provides capacity building and policy development support and thereby contributes to strengthening national road safety systems and reducing road traffic fatalities.

ECE/TRANS/WP.5/2019/5

- Output prepared at the request of ITC (ECE/TRANS/288, para. 25)
- Provides an overview of UNECE, ITC and WPs activities assisting in achieving transport-related SDGs

## Operationalization of Euro-Asian Transport Links

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### **Mandate from ITC: WP.5 to continue its work on the operationalization of Euro-Asian Transport Corridors and other transport corridors**

*Operationalization meant as infrastructure connections and interoperability standards, efficient corridor management, harmonization and simplification of border-crossing formalities and administrative formalities, application of new technologies and digitalization*

- UNECE-OSCE Workshop on Strengthening security and interoperability along Euro-Asian inland transport corridors (12-13 Dec. 2019, Tbilisi)
- WP.5 consulting other WPs (SC.1, SC.2, SC.3, WP.24) on how best to assist the work on enhancing operationalization –

*Paper with collected ideas to be considered at 33<sup>rd</sup> WP.5 session in September 2020*

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**ROAD TRANSPORT**

**RAIL TRANSPORT**

**INLAND WATERWAYS**

**INTER-MODALITY**

Mode	Pillar	Indicator
ROAD	Economic	Efficiency
		Cost
		Infrastructure
		Operations
		Intermodality/combined transport
	Social	ICT and ITS Solutions
		Road traffic rules/behavior
		Road traffic infrastructure
		Vehicle regulations
		Perishable foodstuffs transport
	Environmental	Dangerous goods transport (administrative)
		Dangerous goods transport (infrastructure)
		Fleet
		Emission





### UNECE-OSCE Workshop on Strengthening Security on Inland Freight Routes (Geneva, 3-4 September 2019)

#### Gathered:

Participants from over **25 countries** across the **Euro-Asian region** (Ministries of Transport, Internal Affairs and law enforcement, railway companies, road and rail transport infrastructure operators and managers, customs and border management authorities etc.)

#### Agreed on:

- The need to strengthen **international cooperation in developing inland transport sector specific cyber threat mitigation measures** such as the example provided by the European Rail Information Sharing and Analysis Center (ER-ISAC)
- The need for **inland transport security measures** to be based on **clear definitions and strong (national, regional and international) legal and administrative frameworks** and processes.



### Agreed on (continued):

- The need for **high quality supply chain data that is authentic, complete, reliable and verifiable** in order to feed increasingly digitalised/ automated transport and logistics networks
- The growing importance of **new technologies e.g. corridor-based tracking & tracing devices** and the use of AI/block chain and innovative ICT applications
- The important role of **customs and border management authorities** in managing risks along international transport and logistics chains
- The need to explore the feasibility of establishing a **structured mechanism for the exchange of information on threats and risks on specific corridors**

**2020 UNECE Inland Transport Security Discussion Forum** (scope, date and venue tbc)

UNECE

### A Handbook on Sustainable Urban Mobility and Spatial Planning Promoting Active Mobility



- Assists member States in **integrating transport, health, quality of life and environmental objectives into urban and spatial planning policies**
- Provides many references to **case studies, good practices and examples from cities across the Euro-Asian region** (and beyond)
- Puts forward a **methodology for sustainable urban transport planning** and introduces a concise set of key messages and recommendations as an input to the Fifth High-level Meeting on Transport, Health and Environment (Nov. 2020)



- 2020 workshop theme: Economic impact and cost of urban transport and planning policies

Aim: share experience, knowledge or research on methods to:

- (a) calculate the costs to implement the ‘avoid-shift-improve’ concept and
- (b) to quantify the expected benefits from the ‘avoid’, ‘shift’ and ‘improve’ measures taken

*Interests to speak at the workshop should be communicated to the WP.5 secretariat*

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- WP.5 agreed on its long-term programme of work (2020-2030) – clusters of work aligning with the ITC Strategy while maintaining WP.5 focus
  - Development of transport networks and/or links
  - Transport and climate change
  - Sustainable urban mobility
  - Transport infrastructure data
  - Review and monitoring of emerging issues and sustainable development goals
  - Inland transport security
- WP.5 also agreed biennial 2020-21 programme of work – specific activities and expected accomplishments under each cluster

## Expected 2020-21 accomplishments (examples)

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- Cluster 1: specific activities for corridor operationalization
- Cluster 2: new climate indices analyzed, data and information from national projects collected
- Cluster 3: model developed to assess urban mobility challenges, MaaS handbook
- Cluster 4: availability of observatory on GIS platform
- Cluster 5: trends monitored, increasing application of SITCIN
- Cluster 6: effective exchange of information



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**Thank you!**