Activities of the Group of Experts on Assessment of Climate Change Impacts and Adaptation for Inland Transport (2020-2025)

WP.5, 35th session 5-7 September 2022

Lukasz Wyrowski





Group of Experts on Assessment of Climate Change Impacts and Adaptation for Inland Transport (2020-2025)

the Group's key tasks:

- (i) raise awareness, build capacity and integrate knowledge from countries and the scientific community on climate change impact assessment and adaptation for transport, and
- (ii)further advance the state of knowledge, the analysis of climate change impacts on inland transport and identification of suitable and costs-effective adaptation measures



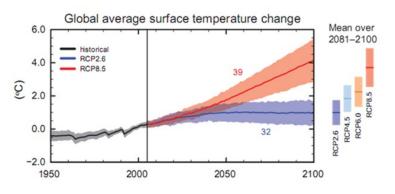
Group of Experts on Assessment of Climate Change Impacts and Adaptation for Inland Transport (2020-2025)

Expected outputs:

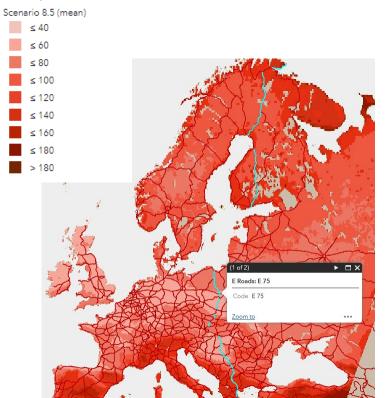
- Maps overlaying climate change projections and transport assets
- Analysis of possible impacts, areas of vulnerability
- Review of national projects
- Database of (successfully implemented) adaptation measures
- Guidelines for integrating climate change considerations in planning and operational practices

Maps overlaying climate change projections and transport assets/ Analysis of possible impacts, areas of vulnerability





Warm spell duration index



In focus:

- High temperatures
- Heavy precipitation

In consideration:

- Windstorms

Analysis is done looking at weather phenomena thresholds such as 25, 32 and 43°C (for temperatures) and 50, 100 and 150mm (for precipitation) to relate it to infrastructure relevant parameters

The analysis is to answer the following questions:

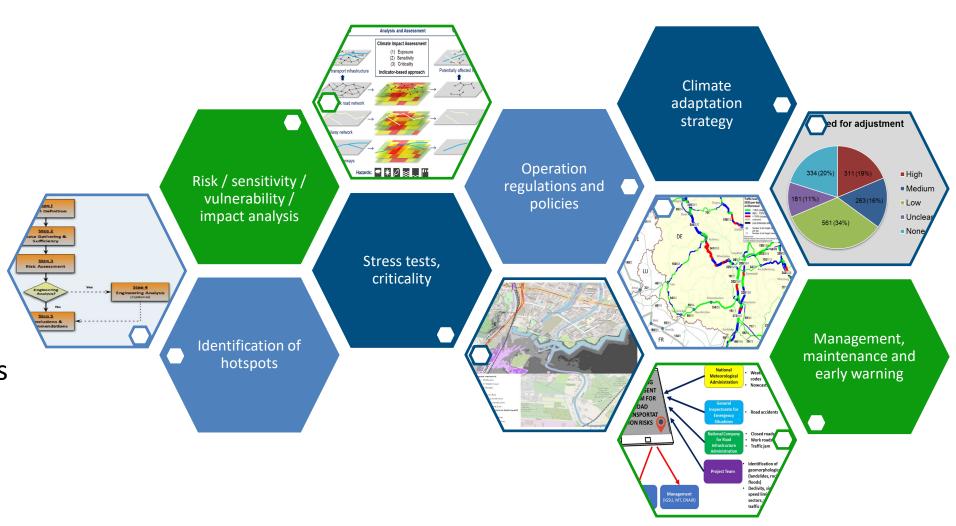
- Can we expect changes to thresholds?
- How should these changes be considered in terms of infrastructure construction parameters

Review of national projects



Review of:

- Approaches
- Methodologies
- Practices
- Tools
- Lessons learned from past events

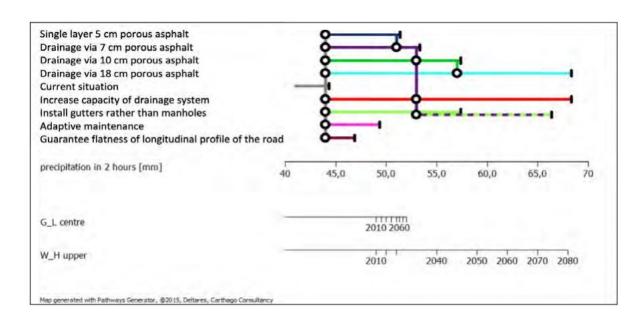


Database with adaptation measures



Implemented adaptation measures in transport – limited availability

 Research on adaption pathways in transport – consideration on elaboration of a guide on use of adaptation pathways in transport



Guidelines for integrating climate change considerations in planning and operational practices



- Business cases for adaptation (economic losses)
 - Dissemination of questionnaire on losses from incidents caused by climate change/extreme weather events => collaboration with UIC, TEM, TER (create understanding on the level of losses due to delays, disruptions and damage)
- Guide/standard for conducting transport asset stress test to climate change hazard(s) (can the asset maintain its level of service in view of the climate change hazard vs intervention programme would be needed)

Guidelines for integrating climate change considerations in planning and operational practices



 Conference in Moscow on 15-16 November 2021 held to raise awareness and exchange experience in work on climate change impacts on transport and adaptation work

- Transport Research Arena 2022 Conference in Lisbon (November) will be informed about the work of the Group of Experts

 Joint work between France, UNECE and UNESCWA to hold in the first half of 2023 a workshop on climate change and climate adaptation for the Mediterranean region

Thank you

Lukasz Wyrowski
Secretary, Group of Experts on Assessment of Climate Change Impacts and Adaptation for Inland
Transport
Lukasz.Wyrowski@un.org