

Actions of the inland transport sector to join the global fight against climate change

ITC acting on climate change adaptation

Group of Experts on assessment of climate change impacts and adaptation for inland transport

85th Session

INLAND TRANSPORT COMMITTEE



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Activities of the Group of Experts (2020-25) Analysis



Impact analysis – maps in GIS overlaying climate change projections

and transport assets

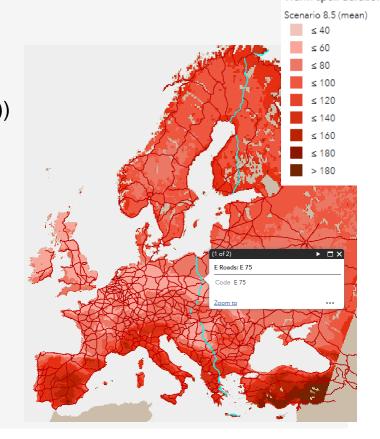
Impacts of interests:

- High temperatures (thresholds 25, 32 and 43°C)
- Heavy precipitation (thresholds 50, 100 and 150mm (daily or 3-day))
- Wind gust (threshold 17 m/s)

Weather phenomena thresholds

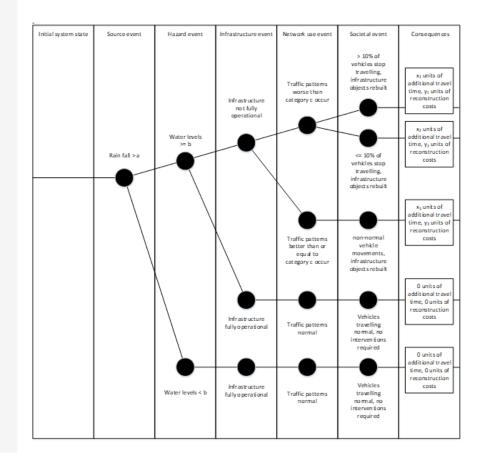
VS

Transport assets construction standards



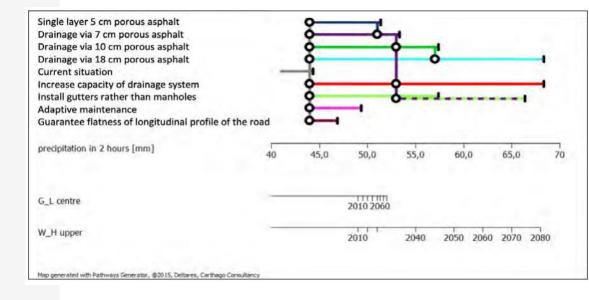


- Framework for stress testing against climate change hazard
 - Stress tests are used to determine the resilience of the transport system in specific situations, by assessing how it will perform in these specific situations, i.e. will it be able to provide specified level of service for which it was built or not.
 - Application of the framework in case studies (invitation to interested asset/network managers, possible start after March 2023)



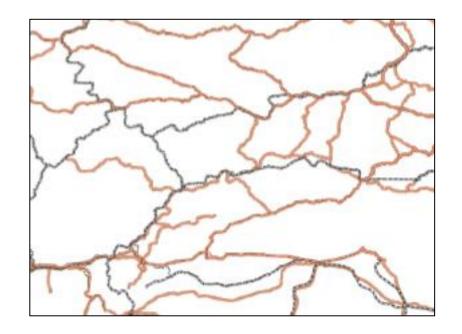


- Guidance on adaptation pathways in the transport sector
 - What are the points at which adaptation action is needed and what should that action be => application of lower-costs and timely measure to make the asset resilient to climate change
 - Application of the guidance in case studies (invitation to interested asset/network managers; possible start after March 2023)





- Guidance for assessing transport asset criticality
 - Criticality as a significance of the consequences on transport service(s) in case of a disruption, e.g.:
 - loss of connectivity
 - loss of performance





Business case for adaptation

Costs of incidents vs costs of adaptation
 Economically optimal level of risk

Cost to society of climate change transport asset incidents (indirect costs)

analysis)

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		Incident type	Location			Precipitation		Traffic disruption and asset damage				Associated costs			
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Activities of the Group of Experts (2020-25)

Awareness-raising



 Raising awareness on adaptation of transport infrastructure to climate change and on setting up an effective intervention programme – Conference for the Mediterranean countries

by UNECE in collaboration with UNESCWA and the French Ministry of Ecological Transition and Territorial Cohesion and other partners

Expert participation financially supported by the Dutch Ministry of Infrastructure and Water Management

15-16 May 2023, Hôtel de Région, Marseille, France

On the programme:

- Climate variability and change and implications on transportation systems
- Methods to assess the impacts of climate change in the transport sector
- Climate projections and corresponding impacts case studies
- Ways to set up effective adaptation programme



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Thank you