



# International and national future work

### **Content**



- 2015-2019 Group of Experts on Climate Change Impacts and Adaptation for Transport Networks and Nodes – lessons learned and recommendations
- 2020-2025 Group of Experts on assessment of climate change impacts and adaptation for inland transport
- National work

### Lessons learned (1/3)



- Complex tasks
- Limited experience in countries (some countries as forerunners)
- Data limitations
  - on transport infrastructure (geo-coded) and on usage data (traffic volumes, freight processed)
  - no one climatic data set for UNECE region

### Lessons learned (2/3)



- First step analysis as a good basis exposure identified
- First step analysis insufficient / complementary analysis needed (natural and anthropogenic factors, characteristics of specific asset, downscaling of projections, impact modelling....)

### Lessons learned (3/3)



- Sharing country experience key to identification and prioritization of transport adaptation needs
- Intermodal, cross-sectoral interactions and transboundary impacts key to avoid maladaptation

### **Recommendations** (1/3)



- Create awareness and understanding of urgency
- Disseminate approaches, tools and methodologies
- Improve availability of geo-coded networks and nodes data (call to WPs managing the infrastructure agreements)
- Geo-code networks and nodes data and present them in GIS

### **Recommendations** (2/3)



- Share data on use (census by WP.6)
- Attempt to obtain consistent data projections for UNECE region (through CORDEX-Core project)
- Expand the analysis on climate impacts (absolute/relative terms, additional indices)
- Implement national projects (with assistance where necessary) to better understand vulnerability to climate change of transport systems

### **Recommendations** (3/3)



- Establish a knowledge database with
  - features and conditions that make a section of a network or a node vulnerable to climate change
  - adaptation measure and their cost-effectiveness
- Elaborate guidance and /or mechanisms for better integration of climate change impacts and projections into planning and operational processes

### **Ongoing steps**



Ongoing process to establish a Group of Experts on assessment of climate impacts and adaptation for inland transport as subsidiary body of WP.5

First step taken by WP.5

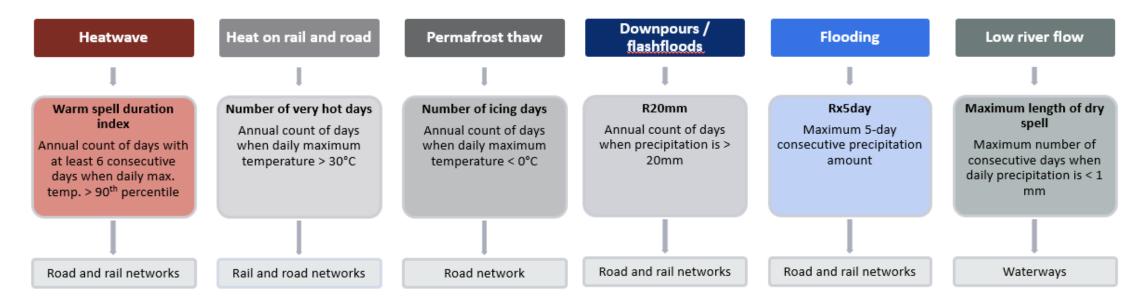
Mandate (2020-25)

 Raise awareness, build capacity and integrate knowledge from countries and the scientific community on climate change impact assessment and adaptation for inland transport



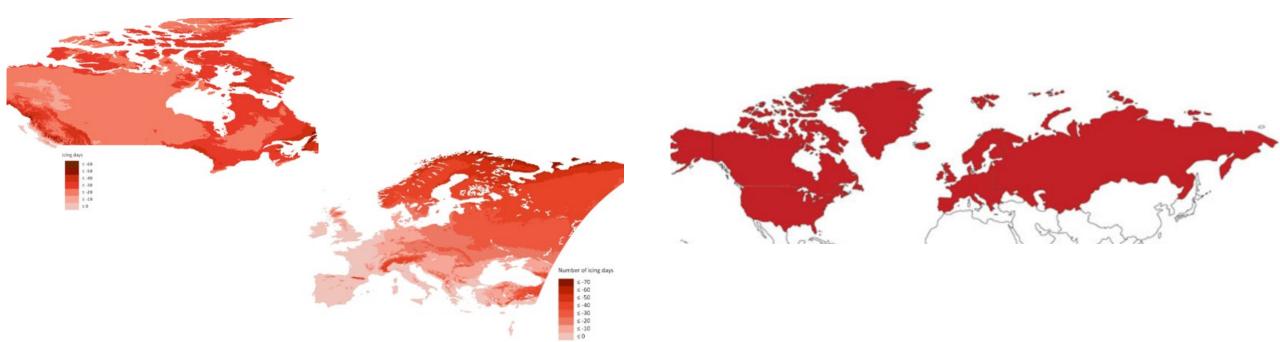
Mandate (2020-25)

 Further advance the state of knowledge on, and the analysis of climate change impacts on inland transport (new indices, absolute/relative analysis)



Mandate (2020-25)

 Further advance the state of knowledge on, and the analysis of climate change impacts on inland transport (cover UNECE region)



Mandate (2020-25)

- Identify suitable and costs-effective measures
  - Collection and analysis of data from national projects

     (analysis on features and conditions that make a section of network or a node vulnerable to climate change)
  - Collection and analysis of adaptation measures
  - Classification of entries by features and conditions

Mandate (2020-25)

Support national projects





#### Methods of work

- GoE to work in accordance with its workplan, meeting twice a year
- Working language English
- GoE to be open to all UN member countries and experts, to interested IGOs and NGOs, to concerned railway companies, freight and forwarding industries

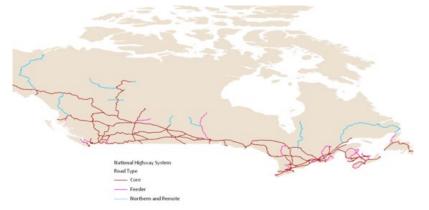
Secretariat: UNECE in close collaboration with WMO, UNFCCC, UNCTAD, ICAO and IMO

### **National work**

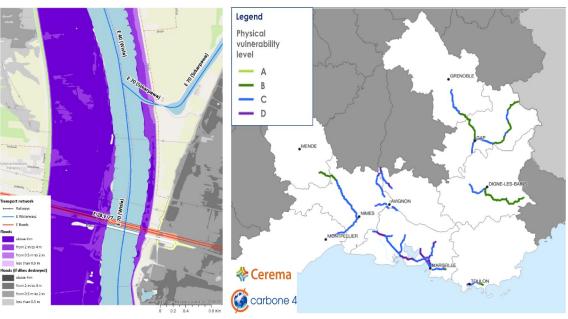


### Geo-coding of networks and nodes





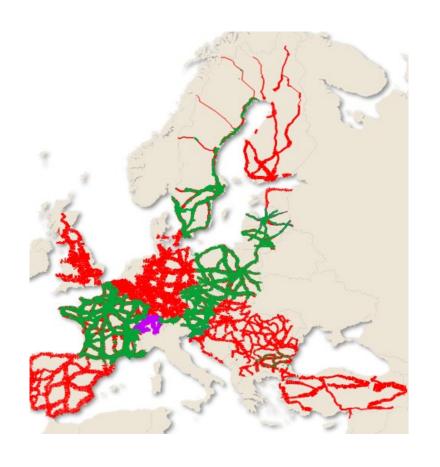


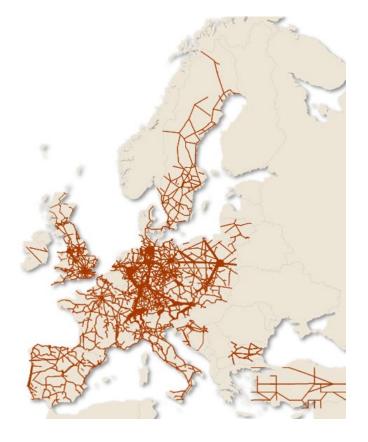


### **National work**



Collection of data on the usage of networks and nodes





### **National work**



#### Conduct work on national climate impact assessment

#### to seek/understand:

- key areas of vulnerability to climate change and extreme weather of transport assets and networks
- natural and anthropogenic factors modifying the risks to transport assets
- impact modelling and assessment of cause-effect relationships between climate parameters and impacts on the infrastructure, and
- cross-sectors and intermodal analysis

design effective adaptation measures