Economic Commission for Europe
Inland Transport Committee
Working Party on Transport Trends and Economics
Group of Experts on Climate Change Impacts and Adaptation for Transport Networks and Nodes

Fifteenth session
Geneva, 18 and 19 December 2018
Item 1 of the provisional agenda

Report of the Group of Experts on Climate Change Impacts and Adaptation for Transport Networks and Nodes on its fifteenth session

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I. Attendance

1. The Group of Experts (hereafter called the Group) on Climate Change Impacts and Adaptation for Transport Networks and Nodes held its fifteenth session on 18 and 19 December 2018. The session was chaired by Mr. J. Kleniewski (Poland).

2. Representatives of the following United Nations Economic Commission for Europe (ECE) member States participated: Canada, Croatia, Finland, France, Germany, Netherlands, Poland, Russian Federation and Slovenia.

3. Representatives of the following United Nations organizations or specialized agencies attended the meeting: United Nations Conference on Trade and Development (UNCTAD).

4. A representative of the European Union was also present.

5. At the invitation of the secretariat, experts from the following organizations participated: Climate Service Centre Germany, University of Geneva and University of the Aegean.

II. Adoption of the agenda (agenda item 1)

 Documentation: ECE/TRANS/WP.5/GE.3/29


III. Climate Change and Transport Networks and Nodes: Presentations of initiatives at national and international levels (agenda item 2)

7. The Group discussed initiatives at national and international levels on climate change impacts and adaptation for transport networks and nodes. The expert from the Russian Federation presented insight into assessment made in the Russian Federation of the impact of climate change on the functioning of the national transport system as well as scenarios for adaptation measures for sea and river ports. The Group took note of the information provided. The use of this information for the Group’s final report is referred to in item V.

IV. Partners and expected contributions (agenda item 3)

8. UNCTAD, the European Commission, the Climate Service Centre Germany and the University of Geneva provided information of relevance to the Group’s work.

9. Information was provided in respect of (a) the third phase of the project “Projection of Economic impacts of climate change in Sectors of the European Union based on bottom-up Analysis (PESETA III)”; (b) a recently completed UNCTAD project with a focus on climate change impacts and adaptation for coastal transport infrastructure in small island developing states (SIDSport-ClimateAdapt.unctad.org); (c) discussions at the twenty-fourth Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 24) in Katowice (Poland) on transport adaptation measures to climate change; (d) open sharing of data, analysis and cases as well as (e) a European Union proposal for the next multiannual financial framework concerning infrastructure climate proofing and evaluation of the European Union strategy on adaption to climate change.

10. Climate Service Centre Germany presented an analysis of higher resolution climate information produced by regional models (EUR11 - 12.5km horizontal resolution). The
analysis was done for part of the ECE region (European Union area) for the following variables:

- Annual daily maximum temperature (tasmax)
- Annual precipitation
- Rx5day (maximum 5-day consecutive precipitation (pr) amount)
- R10mm (annual count of days pr > 10mm)
- R20mm (annual count of days pr > 20mm)
- Tx90p (per cent days when daily max temp. > 90th percentile)
- Tx10p (per cent days when daily max temp. < 10th percentile)
- Tn90p (per cent days when daily min temp. > 90th percentile)
- Tn10p (per cent days when daily min temp. < 10th percentile)
- Consecutive wet days
- Consecutive dry days

11. The results of the analysis would be shared with the secretariat.

V. Discussions on the final report of the Group of Experts
   (agenda item 4)

12. The Group reviewed the outline of the final report taking into consideration Informal document No. 1 tabled by the Vice-Chair and his comments and suggestions. Following discussion, it agreed that the report should contain four main chapters:

- Preamble/introduction
- Climate information and implications for/impacts on infrastructure networks and nodes
- Country policies, practices and studies and
- Conclusions and recommendations

13. The Group considered the content for each of the chapters and agreed on the following inputs providing concrete text proposals for the various sections of the chapters, as follows:

- Climate change implication for transport for chapter 1, to be prepared by Prof. A. Velegrakis (University of Aegean),
- Overview of climate change phenomenology/trends to constitute section 1 of chapter 2 by Prof. Velegrakis,
- Developments in climate modelling to constitute section 2 of chapter 2 by the Climate Service Center Germany,
- Main transport networks and nodes in the ECE region to constitute section 3 of chapter 2 by the secretariat,
- Identification of high risk areas to constitute section 4 of chapter 2 by the secretariat,
- Integrated climate impact assessment and stress tests by Germany and sensitivity and vulnerability analysis for identification of hotspots by Poland to contribute to national policies and good practices for adapting transport infrastructure to climate impact for chapter 3,
• Case studies by Canada and the Russian Federation to present technological and or socioeconomic impacts from climate change on the transport networks (snow roads and permafrost) for chapter 3.

14. The Group encouraged other experts to also provide papers with case studies on technological and or socioeconomic impacts from climate change on the transport networks in their countries.

15. The Group further agreed that the inputs should be sent to the secretariat by 21 January 2019 and requested the secretariat to prepare based on them informal documents for the sixteenth session. These documents would be discussed in-depth at that session and altered as necessary to form a consistent and coherent text for the final report.

16. The Group also agreed that for the final report it would focus only on identification of hotspots for networks and nodes of international importance.

VI. Other business (agenda item 5)

17. The Group of Experts thanked Mr. K. Alexopoulos for his splendid contribution to its work and wished him all the best in his new endeavour.

VII. Date and place of next meeting (agenda item 6)

18. The Group of Experts was informed that its sixteenth meeting was scheduled to be held in Geneva on 29 and 30 January 2019. The subsequent meeting was scheduled for 24 and 25 April 2019 while the last meeting at which the final report should be finalized should take place in early June 2019. The exact date would be provided at the January meeting.

VIII. Summary of main decisions (agenda item 7)

19. The Chair with support of the secretariat summarized the main decisions taken at the fifteenth session.