Economic Commission for Europe

Inland Transport Committee

Working Party on Transport Trends and Economics

Group of Experts on Climate Change impacts and adaptation for international transport networks

Second session
Geneva, 8 November 2011
Item 7 of the provisional agenda
Outline of the contents of the final report of the Expert Group

Draft outline

GROUP OF EXPERTS ON CLIMATE CHANGE IMPACTS AND ADAPTATION IN INTERNATIONAL TRANSPORT NETWORKS

FINAL REPORT

Executive summary

Background and Introduction [previous work, TOR of EG, aims and objectives, workplan]

1. CLIMATE CHANGE: AN OVERVIEW OF THE SCIENTIFIC BACKGROUND AND POTENTIAL IMPACTS AFFECTING TRANSPORT INFRASTRUCTURE AND SERVICES

1. Introduction

2 Climate Change: The Physical Basis

2. 1. Climate Changes: Phenomenology
    2.1.1 Temperature, precipitation and sea level rise
    2.1.2 Extreme events
    2.2 Mechanism
    2.3 Feedbacks and tipping points

3 Climate Change Implications for Transport

3.1 Impacts in polar areas
3.2 Impacts on coastal areas
3.3 Riverine floods
3.4 Heat waves and Droughts
3.5 Permafrost
4 Information on Select Studies on Climate Change Impacts on Transport

4.1 The US Gulf Coast Study
   4.1.1 Gulf Coast Study, Phase I
   4.1.2 Gulf Coast Study, Phase II
4.2 PIANC Study
4.3 Scottish Road Network Climate Change Study
4.4 Climate change and the railway industry: a review
4.5 Future Resilient Transport Networks (FUTURENET)
4.6 Rail safety implications of weather, climate and climate change
4.7 Climate Adaptation of Railways: Lessons from Sweden
4.8 Railway construction techniques in permafrost regions
4.9 Quantifying the effects on rail of high summer temperatures
4.10 ARISCC Adaptation of Railway Infrastructure to Climate Change
4.11 Climate Risk and Business: Ports
4.12 Other

II GOVERNMENT [AND INDUSTRY] SURVEY [UNECE /UN] ON CLIMATE CHANGE IMPACTS AND ADAPTATION IN TRANSPORTATION

1 Introduction [including sample/breakdown of respondents/response rate etc]

2 Results

   Data and information on climate change impacts

   Initiatives for adaptation

   Mechanisms for collaboration [and funding]

3 Analytical summary of findings [including identified needs/good practices]

4 Proposals for [policy] recommendations

III INTERNATIONAL CONFERENCE ON ADAPTATION OF TRANSPORT NETWORKS TO CLIMATE CHANGE

1 Programme

2 Abstracts (Papers/Presentations)

3 Key issues identified/outcomes/recommendations

IV EXISTING BEST PRACTICES

V CONCLUSIONS AND RECOMMENDATIONS
ANNEXES

- Members of the Expert Group/List of Participants
- List of relevant UNECE documents (as appropriate with analytical summary)
- TOR and Programme of Work for EG (ECE/TRANS/WP.5/G.3/2011/1)
- Questionnaire
- References
- Additional literature of relevance to climate change impacts and adaptation in transport
- [List of useful websites]
- [List of useful contacts]