



Economic and Social Council

Distr.: General
25 March 2015

Original: English

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

Seventh session

Geneva, 3–5 June 2015

Item 4 of the provisional agenda

Climate Change and Transport Networks and nodes:

Overview of main concerns and considerations

Climate Change and Transport Networks and nodes: Overview of the other initiatives

Note by the secretariat

I. Mandate

1. This document has been prepared in line with the Terms of Reference of the United Nations Economic Commission for Europe (UNECE) Group of Experts on Climate Change Impacts and Adaptation to Transport Networks and Nodes (ECE/TRANS/2015/6) as adopted by the Inland Transport Committee on 28 February 2015 (ECE/TRANS/248).

A. Review of projects and agreements on Transport Networks of International and National Importance in the ECE region

1. Euro-Asian Transport Linkages Project

2. The Euro-Asian Transport Links (EATL) Phase II project resulted in an updated assessment of transport investment needs along EATL routes at the international level, that is referred to as the updated EATL Investment Plan. The transport projects were evaluated from the standpoint of their relevance and importance for international traffic and their value in connecting Asia and Europe. Phase II also resulted in a unique database on EATL countries' transport networks and their development plans. Furthermore, Geographic Information System (GIS) maps that offer valuable information in an interactive manner have been developed and made available on the Internet.

3. During the fourth meeting of the Group of Experts (November 2006) the Group identified nine priority rail, nine road and inland water routes and ports that link the two continents. The following countries signed the Joint Statement on Future Development of Euro-Asian Transport Links during the seventy-fifth session of the Inland Transport Committee: Armenia, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, China, Croatia, Cyprus, Finland, France, Germany, Greece, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Malta, Mongolia, Pakistan, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Serbia, Spain, Tajikistan, the former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine and Uzbekistan.

2. Trans-European network for motorways and rail

4. The UNECE Trans-European Motorways (TEM) Project is a subregional cooperation among Central, Eastern and South Eastern European countries. The main objectives are:

- (a) To facilitate road traffic in Europe;
- (b) To improve the quality and efficiency of transport operations;
- (c) To balance existing gaps and disparities between motorway networks in Western, Eastern, Central and South-Eastern Europe; and
- (d) To assist the integration process of European transport infrastructure systems.

5. TEM is the backbone of the Pan-European Road Corridors in Central and Eastern Europe (CEE) and of the Transport Infrastructure Needs Assessment (TINA). It is an important tool to coordinate activities across borders. There are 15 member countries: Armenia, Austria (associate member), Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Italy, Lithuania, Poland, Romania, Slovakia, Slovenia and Turkey.

6. UNECE Trans-European Railway (TER) Project is a subregional cooperation for railways among Central, Eastern and South-Eastern European countries. The main objectives are:

- (a) To improve the quality and efficiency of transport operations;
- (b) To assist the integration process of European transport infrastructure systems; and
- (c) To develop a coherent and efficient international railway and combined transport system in accordance with the UNECE Pan-European infrastructure agreements.

7. There are 17 member countries: Armenia, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Greece, Italy, Lithuania, Poland, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia and Turkey.

8. In 2006, UNECE published the TEM and TER projects Master Plan, presenting a reliable and pragmatic short-, medium- and long-term investment strategy for developing road, rail and combined transport backbone networks in the participating countries. In 2012, ECE published a revision of this Master Plan with the objectives (a) to analyze the results of the road and rail infrastructure development in 25 participating countries in Central, Eastern and South-Eastern Europe and in the Caucasus in the period 2005 to 2010, (b) to describe the existing status of road and rail networks, and (c) to set out the road and rail networks development programme until the year 2020.

3. AGR, AGC, AGTC and AGTC agreements

9. The European Agreement on Main International Traffic Arteries (AGR) provides all member Governments with the international legal framework for the construction and development of a coherent international road network, aiming to streamline international road transport and traffic throughout the ECE region. The AGR defines the E road network, consisting of the arteries channelling major international road traffic flows in Europe, and the infrastructure parameters to which those arteries should conform.

10. The European Agreement on Main International Railway Lines (AGC) provides the international legal framework for the development of a coherent international rail network in Europe, aiming to facilitate international rail traffic throughout the continent. The AGC identifies the rail lines of major international importance, the E-rail network, and defines the infrastructure parameters to which they should conform.

11. The European Agreement on Important International Combined Transport Lines and Related Installations (AGTC) provides the technical and legal framework for the development of efficient international combined road/rail transport infrastructure and services. Combined road/rail transport comprises the transport of containers, swap bodies and entire trucks on railway wagons to and from especially equipped terminals. The AGTC determines all important European railway lines used for international combined transport, identifies all terminals, border crossing points, ferry links and other installations important for international combined transport services.

12. The European Agreement on main inland waterways of international importance (AGN) lists inland navigation ports of international importance and sets out technical and operational characteristics of inland waterways. The geographical scope of the E waterways network, consisting of navigable rivers, canals and coastal routes, extends from the Atlantic to the Urals, connects 37 countries and reaches beyond the European region.

4. Infrastructure – TEN-T – Connecting Europe

13. As of January 2014, new transport infrastructure policy of the European Union (EU) connects the continent from East to West and North to South. This policy aims to close the gaps between member States' transport networks, remove bottlenecks that still hamper the smooth functioning of the internal market and overcome technical barriers such as incompatible standards for railway traffic. It promotes and strengthens seamless transport chains for passenger and freight, while keeping up with future technological trends. The new European infrastructure policy will put in place a powerful European transport network across 28 Member States, connected to neighbouring countries and the rest of the world, to promote growth and competitiveness. It will connect East with West and replace today's transport patchwork with a network which is genuinely European.

14. The new Trans-European Transport Networks (TEN-T) core network will be supported by a comprehensive network of routes, feeding into the core network at the regional and the national level. The aim is to ensure that progressively, throughout the entire EU, TEN-T will contribute to enhancing internal markets, strengthening territorial, economic and social cohesion and reducing greenhouse gas emissions.

B. Climate Change Adaptation

EU Adaptation Strategy

15. The EU strategy on adaptation to climate change aims at making Europe more climate-resilient. Taking a coherent approach by complementing the activities of member States, it supports action by promoting greater coordination and information-sharing and by ensuring that adaptation considerations are addressed in all relevant EU policies.

16. Every euro spent on flood protection could save €6 in damage costs, according to estimates. Between 1980 and 2011, floods in Europe killed more than 2,500 people, affected more than 5.5 million and caused direct economic losses of more than €90 billion. The minimum cost of not adapting to climate change is estimated at €100 billion a year in 2020 and €250 billion in 2050 for the whole EU. Given uncertainty over the long-term impacts of climate change, the EU Adaptation Strategy recognises that it makes sense to begin with measures that are low-cost, flexible and good for both the economy and the climate. Adaptation can thus promote sustainable growth, stimulate climate-resilient investment and create new jobs, particularly in sectors such as construction, water management, insurance, agricultural technologies and ecosystem management.

17. In 2013, the Commission launched a mandate for European standardization organizations to start mapping industry-relevant standards in the area of energy, transport and buildings and to identify standards that need to be revised to achieve better inclusion of adaptation considerations. The Adaptation Strategy package provides guidelines to help project developers working on infrastructure and physical assets to climate-proof vulnerable investments. Drawing on the results of its Communication on Green Infrastructure, adopted in May 2013, the Commission explored the need to provide additional guidance for authorities and decision makers, civil society, private business and conservation practitioners to ensure the full mobilisation of ecosystem based approaches to adaptation.

The EU Strategy in a Nutshell

Priority 1: Promoting action by Member States	
Action 1.	Encourage MS to adopt Adaptation Strategies and action plans
Action 2.	LIFE funding, including adaptation priority areas
Action 3.	Promoting adaptation action by cities along the Covenant of Mayors Initiative
Priority 2: Better informed decision-making	
Action 4.	Knowledge-gap strategy
Action 5.	Climate-ADAPT
Priority 3: Key vulnerable sectors	
Action 6.	Climate proofing the Common Agricultural Policy, Cohesion Policy, and the Common Fisheries Policy
Action 7.	Making Infrastructure more resilient
Action 8.	Promote products & services by insurance and finance markets