Information on the Trans-European North-South Motorway (TEM) project development

Submitted by the TEM Project Manager

The Trans European North-South Motorway (TEM) Project is a sub-regional cooperation initiative established to improve road connectivity among Central, Eastern and South Eastern European countries. Furthermore, TEM Project activities are supporting the efforts of member States to achieve the Sustainable Development Goals related to road infrastructure management. This paper presents TEM project activities implemented between two SC.1 sessions.
I. Background

1. The Trans European North-South Motorway (TEM) Project is a sub-regional cooperation initiative, established in 1977, among Central, Eastern and South Eastern European countries and works as a unique platform for road infrastructure providers and operators within framework of United Nations Economic Commission for Europe.

2. TEM strategic objectives are:

(a) To facilitate road traffic in Europe;
(b) To improve the quality and efficiency of road transport operations in UNECE region;
(c) To balance existing gaps and disparities between motorway networks in Western, Eastern, Central and South-Eastern Europe;
(d) To assist the integration process of European transport infrastructure systems; and
(e) To assist participating Governments (pG) in achieving UN Sustainable Development Goals related to road infrastructure management.

3. As of today, the Project has 14 participating Governments (pG) who signed the TEM Cooperation Trust Fund Agreement, of whom 11 are active (in bold): Armenia, Austria (associate member), Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Italy, Lithuania, Poland, Romania, Slovakia, Slovenia and Turkey; four countries have observer status: Montenegro, Serbia, Sweden and Ukraine. Azerbaijani membership is pending, awaiting signature for accession.

4. The TEM Project 2020 vision and mission were defined in the TEM Strategic Plan 2017-2021, adopted during the sixty-eight session of TEM Steering Committee (20-21 February 2017):

(a) VISION: The TEM Project aims at obtaining a role of substantive partner for UNECE and the Inland Transport Committee on road infrastructure management, thereby supporting the United Nations and TEM pG in achieving the sustainable development goals by implementing the project’s strategic initiatives.

(b) MISSION: The TEM Project constitutes a forum for cooperation between the governments of TEM pG, which creates standards, good practices and guidelines for systemic and strategic issues in road infrastructure management. The activities of the TEM Project take the perspective of national government administrations and focus on the issue of sustainable development.

5. TEM strategic activities are defined as:

(a) The Project will foster governmental partnership in developing and maintaining the TEM Network, and possibly be used as an alternative platform to exchange knowledge and experience;

(b) TEM Project will assist in designing, building, maintaining, operating and administering of the TEM Network on the territories of participating Governments as part of an integrated European international road infrastructure, thus filling the gaps in the existing motorway network between Western, Eastern, Central and South-Eastern Europe;

(c) The TEM Project will support UNECE and Inland Transport Committee in pursuing the sustainable development goals (SDGs) related to road infrastructure management;

(d) The TEM Project will interpret and translate the SDGs into strategic initiatives related to road infrastructure management.
II. TEM Activities in year 2019

6. On the basis of the TEM Strategic Plan 2017-2021 and according to Programmes of Work for year 2018 and 2019, the TEM Project realized its activities – reports, workshops, seminars and international cooperation\(^1\) – within three main areas:

   (a) Network improvement and funding of road infrastructure;
   (b) Operational proficiency for road infrastructure operators and authorities;
   (c) Road designing responses to trends in transportation.

7. In terms of network improvement and funding of road infrastructure, TEM Project prepared TEM Backbone Network Report which presents updated information concerning network completeness and road safety issues as a mid-term review of TEM Masterplan adopted in 2011. Moreover in 2019 – back-to-back with the 72nd TEM Steering Committee meeting - the workshop on Evaluation of the efficiency of toll collection systems was held. The workshop findings and TEM pG survey will be a solid basis for the report dedicated to road user charging in TEM pG. The Tolling systems in TEM Member Countries report are scheduled to be published in 2019. Above-mentioned activities provide sound information about performance of TEM pG in terms of network development and delivers updated information about possible sources and mechanisms of road infrastructure funding.

8. In terms of operational proficiency for road infrastructure operators and authorities – a range of activities have been scheduled, broken down into following strategic initiatives:
   
   - Environmental protection;
   - Information systems for the management of the road infrastructure;
   - Innovations in the road infrastructure management;
   - Road safety.

9. Currently four reports are under preparation and will be published or delivered by the end of 2019:

   (a) Business models for road management
   (b) Maintenance service levels for TEM Network
   (c) Asset management for road sub-sector
   (d) BIM approach (Building Information Modelling) in road management

10. The TEM Project Manager is a chairperson of the Group of Experts on Benchmarking Transport Infrastructure Construction Costs, under umbrella of the Working Party on Transport Trends and Economics (WP.5). The Projects also delivers inputs on road infrastructure perspective into the Report on Mobility as a Service which will be prepared under auspices of WP.5.

11. Improving operational proficiency of the road infrastructure operators will enable to foster readiness for future challenges/trends like: electrification, automation and sharing economy as these trends requires well-maintained, self-explaining roads, appropriate safety and security policies and well-managed data in terms of assets and traffic.

12. The International Highways Engineers Exchange Programme (iHEEP) Area V is a forum for annual exchange of knowledge and know-how between Highway Engineers of North America and Europe. iHEEP is a US initiative and TEM Project is their European counterpart. Cooperation with iHEEP started in 1993, and this year the twenty-six TEM iHEEP Area V 2019 Annual Meeting was held in Poland, Warsaw/ Cracow, 9-14 of June. This year seminar was dedicated to one of the priority topics of the TEM Project – BIM

\(^1\) TEM Project cooperates with US Highways Engineering Exchange Program; from 2018 closer cooperation with World Road Association§ (PIARC), International Road Federation (IRF) and regional European road initiatives was foreseen.
(Building Information Management). Representatives of TEM PG and Departments of Transport of four United States of America states shared their experiences and best practices.

III. Conclusions

13. From last meeting of SC.1 in October 2018, three reports\(^2\) of great scope and value are prepared for publishing and three more\(^3\) will be completed until end of 2019. For that reason, high involvement of TEM pG is crucial to obtain best possible quality of data, a key ingredient necessary for any TEM Network analysis.

14. All activities, carried out during the reporting period, were in line with the Programme of Work for 2018 and 2019 adopted by TEM Steering Committee.

15. According to the TEM Trust Fund Agreement, TEM Project address priority topics for participating Governments which leads to a more rapid integration of the motorway networks between Eastern and Western European countries. At the same time, TEM Project stipulates a better harmonization of road legislation and creation of the common motorway standards to ensure a higher quality of service along major corridors in the participating Governments (e.g. road safety, Environmental Impact Assessment, Intelligent Transport Systems and financing) and support achievement of Sustainable Development Goals related to road infrastructure management.

\(^2\) Maintenance service levels for TEM Network, Business models for road management and TEM Backbone Network Report

\(^3\) BIM approach in road management, Asset management for road sub-sector and Tolling systems in TEM Member Countries