UNECE

TEM Project Strategic Plan 2017 – 2021





UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

TEM Project Strategic Plan 2017 – 2021



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UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

The United Nations Economic Commission for Europe (UNECE) is one of the five United Nations regional commissions administered by the Economic and Social Council (ECOSOC). It was established in 1947 with the mandate to help rebuild post-war Europe, develop economic activity and strengthen economic relations among European countries, and between Europe and the rest of the world.

During the Cold War, UNECE served as a unique forum for economic dialogue and cooperation between East and West. Despite the complexity of this period, significant achievements were made, with consensus reached on numerous harmonization and standardization agreements.

In the post-Cold War era, the Commission acquired not only many new Member States, but also new functions. Since the early 1990s, it has focused on analyses of the transition process, using its harmonization experience to facilitate the integration of Central and Eastern European countries into the global markets.

Today UNECE is the forum where countries of Europe, Central Asia and North America – 56 in all – come together to forge the tools of their economic cooperation. That cooperation encompasses economics, statistics, environment, transport, trade, sustainable energy, timber and habitat. The Commission offers a regional framework for the elaboration and harmonization of conventions, norms and standards. In particular, UNECE experts provide technical assistance to the countries of South-East Europe and the Commonwealth of Independent States. This assistance takes the form of advisory services, training seminars and workshops where countries can share their experiences and best practices.

TRANSPORT IN UNECE

The UNECE Sustainable Transport Division acts as the secretariat of the Inland Transport Committee and the ECOSOC Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals.

The Inland Transport Committee and its 20 working parties, as well as the ECOSOC Committee and its sub-committees, are intergovernmental decision-making bodies that work to improve the daily lives of people and businesses around the world in measurable ways and with concrete action to enhance traffic safety, environmental performance, energy efficiency and the competitiveness of the transport sector.

The Inland Transport Committee is a unique intergovernmental forum that was set up in 1947 to support the reconstruction of transport connections in post-war Europe. Over the years, it has specialized in facilitating the harmonized and sustainable development of inland modes of transport. The main and most well-known results of its ongoing work are reflected in the following outcomes:

- Fifty-eight United Nations conventions and many more technical regulations, which are updated on a regular basis and provide an international legal framework for the sustainable development of national and international road, rail, inland water and intermodal transport, including the transport of dangerous goods, as well as the construction and inspection of road motor vehicles.
- The Trans-European North-South Motorway, Trans-European Railway and the Euro-Asia Transport Links projects, which facilitate multi-country coordination of transport infrastructure investment programmes.
- The TIR system, which is a global customs transit facilitation solution.
- The tool called For Future Inland Transport Systems (ForFITS), which can assist national and local governments in monitoring carbon dioxide (CO₂) emissions coming from inland transport modes and in selecting and designing climate change mitigation policies, based on their impact and adapted to local conditions.
- Transport statistics methods and data that are internationally agreed on.
- Studies and reports that help transport policy development by addressing timely issues, based on cuttingedge research and analysis.
- Special attention to Intelligent Transport Services, sustainable urban mobility and city logistics, as well as to increasing the resilience of transport networks and services in response to climate change adaptation and security challenges.



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LIST OF ABBREVIATIONS

DESCRIPTION
Building Information Modelling
Conference of European Directors of Roads
Directorate-General for Mobility and Transport
Euro-Asian Transport Links
European Road Transport Telematics Implementation Coordination Organization
Highway Engineering Exchange Programme
Inland Transport Committee
National Road Administration
TEM Strategic Plan for 2017-2021
Permanent International Association of Road Congresses
Project Central Office
Public-Private Partnership
Trans-European North-South Motorway
TEM Project member States
Trans-European Railway
United Nations Economic Commission for Europe

EXECUTIVE SUMMARY

The Trans-European North-South Motorway (TEM) Project was established in 1977 as a regional transport cooperation initiative for the Central and Eastern European countries. As of today, there are 15 TEM member States (TEM mS).

The TEM Strategic Plan, as a roadmap for the implementation of the TEM Project for 2017-2021, takes into account:

- The new challenges faced by the TEM mS in international cooperation caused by new global megatrends and development of new technologies; and
- The need for an updated, revised implementation plan, based on a new agreement between the TEM mS on future cooperation, financing and implementation of the TEM Project.

The TEM mS believe that the TEM Project will foster governmental partnerships in developing and maintaining TEM Backbone Network, and will be a valuable platform for the exchange of knowledge and experience.

The significance of the TEM Project is defined by the ability to meet its objectives. It cannot be determined without a clear perspective of the value of the TEM Project to TEM mS and to UNECE. The expected value of the TEM Project is presented in the diagram below.

Figure 1 - TEM Project value proposition

































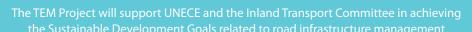












TEM PROJECT

Criteria for selection of Strategic Initiatives in the TEM Project

Common interest of member

SYSTEMS AND SOLUTION MODELS

EFFICIENCY OF PUBLIC SERVICES

PRAGMATISM OF RESULTS

- 1. The TEM Project will support UNECE and the Inland Transport Committee in achieving the Sustainable Development Goals related to road infrastructure management topics, broadly defined as transportation and mobility of goods and people, are essential in achieving the goals and targets identified by the United Nations Resolution of 25 September 2015, "Transforming our world: the 2030 Agenda for Sustainable Development". The majority of the 17 goals that were defined as essential in achieving sustainable development are directly or indirectly related to road infrastructure. The TEM Project will bring added value to UNECE and the Inland Transport Committee by addressing the topics related to the road infrastructure management and will facilitate the achievement of the United Nations Sustainable Development Agenda.
- 2. The Sustainable Development Goals will be translated into Strategic Initiatives related to road infrastructure management. Today, the TEM mS should cooperate even closer than before: (i) as the road infrastructure related challenges are similar for most mS and (ii) TEM mS should face new expectations set forth by the United Nations 2030 Agenda. The TEM Project will bring an added value by, on the one hand, undertaking initiatives which support the United Nations 2030 Agenda in road infrastructure management topics, and on the other hand, in standing out from similar international initiatives. The TEM Project Strategic Initiatives will focus on topics which:
- a. Constitute a common and similar challenge or problem for all TEM mS;
- b. Address the most relevant, comprehensive and strategic issues in road infrastructure management;
- c. Focus on what is closest to the administration the scope and manner of providing public services;
- **d.** Stimulate tangible and practical results, which can be used by the TEM mS and UNECE to create new patterns of operation.

The value of the TEM Project defined in this way will require a different implementation approach, in particular in the context of the principles of project management (including the project organizational structure and management rules) and the range of Strategic Initiatives for implementation in the years 2017-2021. The new organizational structure entails a more extensive involvement of the TEM mS in the Project. In addition to the National Coordinators, new project roles such as TEM National Area Contributors and external contributors will be appointed.

1. TEM PROJECT VALUE PROPOSITION

1.1. INTRODUCTION

The TEM Project was established in 1977 as a regional transport cooperation initiative for the Central and Eastern European countries. The main objectives of the Project are:

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

These objectives were achieved by various initiatives, of which the most important are:

- The TEM and TER Master Plan and its revised version focused mainly on the existing TEM Backbone Network and planned investments in TEM mS;
- TEM Standards and Recommended Practice a summary of user requirements, know-how and achievements in the design, construction and maintenance of motorways.

To this date, TEM Project has created significant value for its participants, in particular:

- Allowed the exchange of experiences in application of different solutions in relation to planning, design, construction and maintenance of roads;
- > Enabled to forge a network of formal and informal relations between the government representatives in TEM fostering communication and exchange of ideas;
- > Allowed to create new common solutions based on individual case studies and new standards which were later disseminated to other countries;
- > Enabled cooperation with similar initiatives implemented under the umbrella of UNECE, in particular those relating to other modes of transportation (e.g. railroads TER, EATL);
- > Supported cooperation with other supranational institutions (Permanent International Association of Road Congresses (PIARC), Conference of European Directors of Road (CEDR) etc.) handling planning, design, construction and maintenance of roads.

Over the years, the TEM Project has proven to be valuable to the TEM mS, and to a large extent has achieved the goals defined in the TEM Trust Fund Agreement. At the same time, the need to update the TEM Project's focus has become increasingly urgent, in view of the following challenges:

- 1. The fast-paced changes in the modern world are shaped by megatrends, in particular, related to:
 - The rapid development and widespread use of modern information technologies in almost every area of life. New technologies revolutionize the functioning of governments, institutions, corporations and individuals;
 - New socioeconomic trends shaped by modern technologies, e.g. the "Sharing economy", enabling a rapid access to knowledge, and the coordinated use of existing resources;
 - The growing demand for sustainable solutions, both from governments and the public opinion, reflected in declarations, specific actions and legislative changes at the national level providing a new framework for future generations.

These megatrends can directly influence how governments act in road infrastructure management — governments requires a long-term strategic approach, beginning with the amount of financial support needed.

2. The road infrastructure management activities (such as planning, construction, operation and maintenance) are complex. Individual government decisions in these matters shape not only the local socioeconomic and environmental situation, but also has repercussions in neighbouring countries and the entire region. Thus, coordination is needed

not only for the planning of the network of roads and motorways between countries, but also in other management aspects of road infrastructure. The coordination of activities can take different forms, ranging from the exchange of experiences to seeking best practices for creating common standards of operations. TEM operation standards could be ultimately recommended by the Inland Transport Committee (ITC) and UNECE to all Governments.

3. Currently, road infrastructure management is not represented in a comprehensive manner in the ITC framework. Different aspects are the subject of the different Working Parties, e.g. the SC.1, the WP.1, the WP.5, and the WP.6.

The TEM Project has implemented some of its objectives so far, but the future formula needs to be tailored to the needs of TEM mS and to the new challenges, including implementation of the United Nations 2030 Agenda. The TEM Project must generate the added value which is adequate to the expenditure incurred by the TEM mS for implementation. The value has to be unique and will distinguish the Project from other forms of intergovernmental and international cooperation in road infrastructure development. This condition is essential in adopting the Trust Fund Agreement Attachment 2017-2021 by the TEM mS, and in future financing of the TEM Project by the TEM mS.

1.2 TEM PROJECT VALUE PROPOSITION

The new plan for the TEM Project extends beyond the existing framework and objectives, creates a broader agenda, and redefines the grounds for cooperation between governments. From this perspective, the TEM Project fits into the overarching goals and activities of UNECE. The TEM mS believe that the Project should be vital for intergovernmental cooperation under the umbrella of UNECE, particularly in support of the Inland Transport Committee¹ and of the TEM mS Governments to identify and to solve the problems of road infrastructure management.

The updated formula of the TEM Project should also contribute to:

- > Greater commitment from the TEM mS to the Project, including the implementation of the Strategic Initiatives;
- > Re-engaging of the member States that have opted out of the project;
- > Extending the Project to new countries that are not yet directly involved, even outside Central and Eastern Europe, which will raise the rank of the project;
- > Extending the framework of the Inland Transport Committee to include road infrastructure management topics.

Creating added value for TEM mS has been defined in the following way:

1. The TEM Project supports UNECE and the Inland Transport Committee in pursuing the Sustainable Development Goals related to road infrastructure management

One of the key issues that is currently shaping international cooperation in the United Nations is sustainable development. The United Nations resolution A/RES/70/1 of 25 September 2015, "Transforming our world: the 2030 Agenda for Sustainable Development" sets forth 17 goals considered by the international community as the most important in securing a stable and safe environment for future generations. Most of these goals can be directly or indirectly associated with the activities of UNECE in inland transport development (e.g. United Nations legal instruments, norms and regulations on inland transport).

Defining the new paramount and strategic Sustainable Development Goals by the United Nations also means reshaping and adapting the existing initiatives that are carried out under the auspices of the United Nations to the new agenda. This includes the TEM Project and should have a direct impact on its future scope and formula of operation.

The TEM Project should support the pursuance of the United Nations Sustainable Development Goals, including:

- Goal 3 Ensure healthy lives and promote well-being for all at all ages;
- Goal 7 Ensure access to affordable, reliable, sustainable and modern energy for all;
- Goal 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation;
- Goal 10 Reduce inequality within and among countries;

¹ Including SC.1, WP.1, WP.5, WP.6 and WP.29/GRPE.

- Goal 12 Ensure sustainable consumption and production patterns;
- Goal 13 Take urgent action to combat climate change and its impacts;
- Goal 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.















Creating value by the TEM Project in sustainable development will depend on closer cooperation with UNECE and the Inland Transport Committee on the key matters set forth in the United Nations Sustainable Development Agenda. The TEM Project would provide substantive support for the Inland Transport Committee and its Working Parties (particularly SC.1, WP.1, WP.5, and WP.6) in defining solutions for the strategic issues related to road infrastructure management, in line with the United Nations Sustainable Development Goals and the needs of individual TEM mS.

2. The TEM Project will interpret and translate the Sustainable Development Goals into Strategic Initiatives related to road infrastructure management

In the opinion of the TEM mS, the Sustainable Development Goals cannot be achieved within the current project framework, which should therefore be adapted to new circumstances and challenges. Such adaptation should follow two phases:

PHASE I – REDEFINING THE SUBSTANTIVE SCOPE OF THE PROJECT – The TEM Project, rather than focus on issues of coordinating the development of motorway network in the countries of Central and Eastern Europe, should address broader issues associated with the road infrastructure management. The TEM Project provides a perfect cooperation platform for new solutions between TEM mS. It can bring together government representatives dealing with road infrastructure management issues that should and can be solved at a national level and, at the same time, require coordination on an international level.

PHASE II – DECIDING ON THE STRATEGIC INITIATIVES CONSISTENT WITH SUSTAINABLE DEVELOPMENT GOALS AND THE NEEDS OF TEM MS – The TEM Project road infrastructure management activities will be presented in the context of achieving the Sustainable Development Goals. Similar issues are also addressed by other international organizations and initiatives. While not directly related to the United Nations or UNECE, these initiatives foster cooperation between governments, institutions, and private entities in road and transport management. The scope of the TEM Project should cover the issue of road infrastructure management in a very specific scope adapted to the needs of TEM mS, and it should stand out from other similar initiatives and international organizations. For the TEM mS, the Strategic Initiatives implemented in the TEM Project should concentrate on the issues which:

- a. Constitute a common or similar challenge or problem for all TEM mS Strategic Initiatives covered by the TEM
 Project should address only the issues identified by TEM mS as areas of common interest and of joint effort for the
 Project;
- b. Address the most relevant, comprehensive and strategic issues in road infrastructure management the TEM Project should focus on the problems that are interdisciplinary, systemic, exemplary, and influence the decisions of TEM mS and the national road administration on road infrastructure management. This should be one of the key features that distinguishes the project from other international initiatives, that is to provide solutions that can be used by governments to design or modify national solutions;
- c. Focus on what is closest to government/administration, i.e. the scope and manner of providing public services in road infrastructure management. The key challenges would be to:
 - Design a catalogue of the typical public services that are provided by the governments within the framework of road infrastructure management; and
 - Assist governments to provide these public services in an efficient and effective way.

These issues are extremely important in the current budgetary constraints which are affecting both developing and developed European countries. The knowledge and experience gained by the TEM National Coordinators and TEM National Area Contributors in the process of executing TEM Strategic Initiatives will be transferred to the government and could assist in designing of legal or organizational solutions.

d. Stimulate the achievement of tangible and practical results which can be used by TEM mS and UNECE to create new patterns of operation. In this context, the TEM Project will seek solutions and deliverables, specified in the form of standards, guidelines or good practices that can be used by individual countries within their own legal systems and organizational practices.

1.3 TEM PROJECT - MISSION AND VISION

The TEM Project 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 member States in achieving the Sustainable Development Goals by implementing the project's Strategic Initiatives.

The mission of the TEM Project defines the implementation of the vision:

The TEM Project constitutes a forum for cooperation between the governments of TEM member States, which creates standards, good practices and guidelines for systemic and strategic topics in road infrastructure management. The activities of the TEM Project take the perspective of national government administrations and focus on the sustainable development.



2. TEM PROJECT: ORGANIZATIONAL STRUCTURE AND PROJECT MANAGEMENT

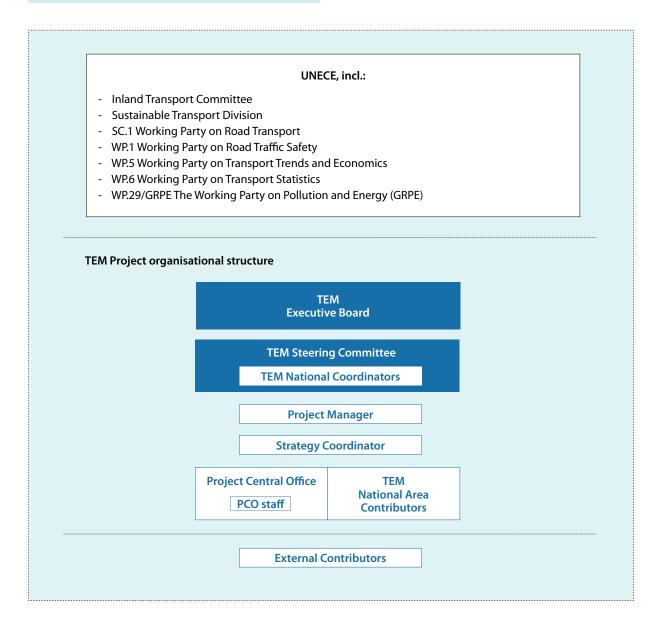
2.1. ORGANIZATIONAL STRUCTURE

The new organizational structure of the TEM project has been prepared based on the following assumptions:

- The TEM Project will remain one of the initiatives pursued in the UNECE agenda, that deals with the cooperation of the European countries in the area of road infrastructure management;
- A new organizational role will be established within the TEM Project: TEM National Area Contributor;
- Key responsibilities will be defined for the newly created organizational units and roles.

The organizational structure of the TEM Project is presented in the figure below.

Figure 2 - The organizational structure of the TEM Project



The TEM Project shall be one of the intergovernmental initiatives implemented under UNECE and ITC. The project, unlike other ITC initiatives, shall focus on the selected strategic questions of road infrastructure management. The TEM Project shall:

- > Report on the progress of implementation and the results of different Strategic Initiatives at the meetings of the ITC:
- > Cooperate with other bodies in the framework of the Committee (such as SC.1, WP.1, WP.5 and WP.6) on the issues of road infrastructure management;
- > Cooperate on issues related to road infrastructure management, which arise from other initiatives of UNECE or the ITC.

In the new structure, the responsibilities and roles of organizational units are defined as follows:

- 1. The **TEM Steering Committee** shall be the body dedicated to the strategic and operational management of the Project. The TEM Steering Committee shall consist of TEM National Coordinators, supported by the Regional Advisor of UNECE Sustainable Transport Division. The tasks of the TEM Steering Committee shall involve, in particular:
 - > Adopting internal rules of operations of the Project, and strategic and operational objectives;
 - > Adopting the TEM Annual Report which will be prepared by the TEM Project Manager;
 - > Approving programmes of work and adopting operational budgets and financial reports on their execution;
 - > Assess the work of the TEM Project Manager and the TEM Strategy Coordinator on the basis of the TEM Annual Report;
 - > Launching of the Strategic Initiatives;
 - > Adopting implementation details, including particularly the scope and the expected results of the Strategic Initiatives;
 - > Monitor the operational implementation of the Strategic Initiatives at the TEM Project level;
 - > Adopting periodic implementation summaries on the of the Strategic Initiatives;
 - > Coordinating operational matters associated with the current TEM Project management;
 - > Communicating the current implementation progress of the Strategic Initiatives; and
 - > Functions (b), (e) and (f) stipulated in TEM Trust Fund Agreement, Attachment 1 2013-16, Annex B.
- 2. The **TEM National Coordinators** will oversee and coordinate project implementation in each TEM member State on the operational level. The responsibilities shall involve:
 - > Monitoring the implementation of the Strategic Initiatives at the country level;
 - > Cooperating with the TEM National Area Contributors to support the implementation of the Strategic Initiatives;
 - > Communicating the progress of implementing the Strategic Initiatives to the TEM Steering Committee;
 - > Updating the contact list of TEM National Coordinators and TEM National Area Contributors; and
 - > Functions (2) to (6) stipulated in TEM Trust Fund Agreement, Attachment 1 2013-16, Annex C.
- 3. The **TEM Project Manager** shall be responsible for the operational management of the TEM Project and the work of TEM Project Central Office (PCO). The TEM Project Manager shall be appointed/selected by the Steering Committee and remunerated from the project budget. The Project Manager shall report directly to the Director of the UNECE Sustainable Transport Division. The role shall involve:
 - > Coordinating the work of the TEM Strategy Coordinator and the project personnel in the TEM Project Central Office (PCO) in the framework of various activities of the project;
 - > Ensuring the efficient maintenance and upgrading of PCO Information Technology infrastructure, such as computers, laptops, printers, fax machines, etc., important for the smooth operation of the office;
 - > Preparing the Terms of Reference for the TEM Strategy Coordinator and ensuring its implementation based on the principles of teamwork and integrity, as well as through the supervision of their performance;
 - > Acting as Secretary to the TEM Steering Committee sessions (preparation of invitations, agendas, documents and conclusions/reports for the TEM Steering Committee);

- > Submitting the draft programmes of work and budgets of the TEM Project for approval by TEM Steering Committee and ensuring its implementation as adopted;
- > Organizing and preparing substantive (technical) and administrative reports and documentation for the consideration of TEM mS;
- > Monitoring the implementation of the TEM Strategic Plan and the Strategic Initiatives and presenting the implementation status to the TEM Steering Committee;
- > Preparing the TEM Annual Report to be submitted for approval by the TEM Steering Committee;
- > Distributing information to the TEM mS on matters requiring their decisions well in advance;
- > Maintaining continuous liaison with the TEM National Coordinators on all matters of implementation of the TEM Project activities;
- > Preparing the expert's report on the overall activities of the TEM Project Central Office and developments in the TEM Project during the period under review for the sessions of Inland Transport Committee, Working Party on Transport Trends and Economics and of Working Party on Road Transport;
- > Maintaining close cooperation with the Working Party on Road Transport and the Working Party on Road Safety to ensure synergies in activities and the development of concrete project proposals and activities on road safety and intelligent transport systems, and to avoid overlap;
- > Providing assistance for the administration of the TEM Project budget, according to the decisions of the TEM Steering Committee and the provisions of the financial rules and regulations of the United Nations;
- > Advising TEM Steering Committee in the selection of consultants to render assistance in the execution of specific activities in accordance with TEM programme of work and overseeing the work of consultants;
- > Carrying out other tasks as assigned by the TEM Steering Committee and by the by of the UNECE Sustainable Transport Division;
- > Providing expert advice and collaborating closely with professional staff in the UNECE Sustainable Transport Division and TEM Project Central Office staff;
- > Representing the TEM Project at the meetings with external institutions, industry organizations, etc.;
- > Fundraising for the TEM Project.
- **4.** The **Strategy Coordinator** shall be responsible for implementing the strategy on daily basis with a support of PCO and assisting the TEM Project Manager. The Strategy Coordinator shall be appointed/selected by the Steering Committee.

The responsibilities of the Strategy Coordinator shall involve:

- > Assisting the TEM Project Manager to coordinate the work of the project personnel in the TEM Project Central Office in the framework of various activities of TEM Project;
- > Assisting the TEM Project Manager to prepare the draft programmes of work and budgets for TEM Project for approval by the TEM Steering Committee and administering it as adopted;
- Acting as Secretary to TEM Steering Committee sessions in the absence of the TEM Project Manager;
- > Assisting the TEM Project Manager to prepare and distribute information to the mS on matters requiring their decision well before the meetings;
- > Assisting the TEM Project Manager to maintain continuous liaison with the National Coordinators on all matters concerning the implementation of TEM activities;
- > Assisting the TEM Project Manager to prepare the report on the overall activities of PCOs and developments in the TEM Project during the period under review for the sessions of Inland Transport Committee, Working Party on Transport Trends and Economics and of Working Party on Road Transport;

- > Supporting the implementation of the Strategic Plan, especially in the field of Strategic Initiatives;
- > Supporting TEM Project Manager to prepare substantial documents related to the TEM programme of work;
- > Drafting organizational documents, including in particular, the draft documents on status of the TEM Project in collaboration with TEM Project National Coordinators;
- > Managing and archiving the documentation of the TEM Project;
- > Preparing meetings of the TEM Project Steering Committee with the support of TEM PCO;
- > Ensuring ongoing communication of TEM Project-related issues with TEM Project stakeholders;
- > Providing expert advice and collaborating closely with both international staff and TEM Central Project Office staff:
- > Advising the TEM Project Manager to select consultants for the execution of specific activities in accordance with the TEM Strategic Plan;
- > Overseeing the work of experts who provide consultancy services in the framework of various activities, and with the TEM Governments providing contributions in-kind to the TEM;
- > Acting on behalf of the TEM Project Manager upon his/her request or during his/her absence;
- > Carrying out other tasks assigned by the TEM Project Manager.
- 5. The **TEM Project Central Office** is located in Warsaw, Poland and shall coordinate all TEM activities and operate under the overall direction of the TEM Steering Committee, with guidance from UNECE as an Executing Agency. The PCO shall be comprised of:
 - > A Project Manager;
 - > A Strategy Coordinator;
 - > Other PCO staff provided by the host country.
- **6. Other PCO staff** should be provided by Poland and shall be responsible for running the office on a daily basis and supporting the TEM Project Manager and the Strategy Coordinator. The responsibilities of the PCO staff shall involve:
 - > Maintaining the back office for the TEM Project;
 - > Support in secretarial and translation tasks;
 - > Maintaining a contact list of TEM National Coordinators and TEM Project National Area Contributors.
- 7. The **TEM National Area Contributors** will have a permanent new role in the organizational structure of the project to coordinate the implementation of the Strategic Initiatives in individual member States. In particular, their responsibilities shall involve:
 - > Coordinating the implementation or directly implementing a strategic initiative, if the responsibility for the implementation of the initiative has been assigned to the country and strategic area of the particular representative;
 - > Providing a substantive contribution from a member State, necessary for the implementation of the Strategic Initiatives;
 - > Coordinating cooperation with external entities involved in the implementation of the Strategic Initiatives;
 - > Evaluating implementation results of the Strategic Initiatives;
 - > Cooperating with the TEM Project Manager and TEM National Coordinators, in particular in relation to the implementation progress of the Strategic Initiatives.

2.2. KEY PROJECT MANAGEMENT RULES

Project management rules adopted by TEM Steering Committee establish the key principles for the implementation of the TEM Project. The rules have been defined for:

- > Management of the entire project;
- > Management of particular strategic initiative.

The key principles of TEM Project management are:

- 1. The Steering Committee shall be composed of TEM National Coordinators nominated by the Governments of member States and supported by the Regional Advisor of UNECE. It is recommended that the country representatives in the Steering Committee are representatives of the Government or the National Road Administration (NRA) at the mid-management level.
- 2. The Steering Committee shall carry out its workthrough direct and virtual meetings using audio-visual communication. The Steering Committee shall meet in person at least once every six months.
- **3.** The TEM National Area Contributors might be appointed by the particular government for each of the following TEM strategic areas:
 - > Environmental protection;
 - > Organization and financing of the roads and motorways;
 - > Information systems for the management of the road infrastructure;
 - > Innovations in road infrastructure management;
 - > Road safety.

It is recommended that the TEM National Area Contributors are representatives of the Government or the NRA, capable and experienced in their strategic area of operation.

- **4.** The TEM mS shall obtain professional support (experts, consultants, etc.) for the implementation of the Strategic Initiatives in each of the strategic areas. Decisions/mandates in this regard will be confirmed by the Steering Committee.
- 5. The Steering Committee shall adopt, on the basis of proposals of the TEM Project Manager, the rules of procedure for the Strategic Initiatives and rules for reporting for the implementation of the Strategic Initiatives.

The key management principles of the Strategic Initiatives within the framework of the TEM Project are:

- 1. Each strategic initiative shall be assigned to a specific strategic area.
- 2. Responsibility for coordination and implementation of the Strategic Initiatives within each of the strategic areas shell rest with one of the member States. The remaining states involved in the implementation of the initiative shall actively participate (in particular as instructed by their TEM National Area Contributor who shall participate in the implementation of the initiative) by providing information and the necessary substantive contribution.
- 3. In particular, the TEM National Area Contributor shall be responsible for the implementation of the Strategic Initiatives in the strategic area, if the implementation responsibility rests with a particular member State.
- **4.** In the case of assigning the strategic initiative implementation responsibility to a given member State, the TEM National Area Contributor (in cooperation with the TEM National Area Contributors from other interested member States) shall draw a concept note in terms of outputs, resources and activities related to the implementation, and submit it to the Steering Committee for approval.

3. NEW MEMBERS AND RELATIONS TO OTHER INITIATIVES

3.1. NEW MEMBERS CONSIDERATIONS

Two of the most important conditions for developing the TEM Project is motivating the current TEM member States and the expanding it to the States that are not yet involved. In particular, shifting the focus of the project from motorway network development coordination to creating added value for the TEM mS by implementing the United Nations Sustainable Development Agenda for road infrastructure management should help to attract new countries.

The principles and procedures for expanding the project to new member States are defined in the TEM Trust Fund Agreement. The actions to attract new countries shall be developed by the Project Manager and approved by the Steering Committee.

3.2. RELATIONS TO OTHER INITIATIVES

The TEM Project shall maintain partnerships with other initiatives and international organizations involved in transportation, including CEDR, PIARC, DG MOVE, HEEP, and ERTICO. In particular, these partnerships shall be based on:

- > The exchange of experiences and outcomes of the Strategic Initiatives with the organizations;
- > Joint implementation of similar initiatives (e.g. in cooperation with TER);
- > The potential involvement of the TEM National Area Contributors in implementing the initiatives in other bodies or projects of UNECE.

In addition, the TEM Project shall continue its cooperation with the HEEP, which should include (i) substantive input to TEM Strategic Initiatives and (ii) the participation of the HEEP representatives and representatives of the TEM Project in annual work meetings.

PROJECT BUDGET

The Project budget was prepared with the following assumptions:

- 1. The budget shall cover the costs related to the new organizational structure.
- 2. The budget shall cover the assumed remuneration of the TEM Project Manager and the Strategy Coordinator.
- **3.** Each Strategic Initiative shall maintain its own budget, and the budgeted amounts shall include the costs of external consulting, if applicable.

The budget is presented in the following table.

Table 1 - TEM Project budget

ACTIVITIES	TVDE			COSTS	(USD)		
ACTIVITIES	TYPE	2017	2018	2019	2020	2021	Total
Steering Committee activities		22,500	22,500	22,500	22,500	22,500	112,500
PCO Costs (staff)		30,000	60,000	60,000	60,000	60,000	270,000
Project Manager		16,200	32,400	32,400	32,400	32,400	145,800
Strategy Coordinator		13,800	27,600	27,600	27,600	27,600	124,200
TEMSTAT activities			6,000	5,000	5,000	5,000	21,000
Other costs (PCO, external coordination etc.)		14,000	18,000	18,000	18,000	18,000	86,000
AREA A – ENVIRONMENTAL PROTECTION							
A.1. Evaluation of efficiency of the applied solutions	workshops			4,000			
for the protection of the environment - the methodology / measurement standards	consulting			12,000			16,000
A.2. Development of standards for road equipment	workshops			4,000			16,000
in the context of environmental protection	consulting				12,000		16,000
AREA B – ORGANIZATION AND FINANCING OF T	HE ROADS AN	ID MOTO	RWAYS				
B.1. Functioning and financing of the national road	workshops	4,000					
infrastructure management – solutions used in different states	consulting		12,000				16,000
B.2. Evaluation of the efficiency of toll collection	workshops				4,000		16,000
system – evaluation methodology	consulting				12,000		
B.3. Conditions for creating an efficient PPP in the	workshops		4,000				16,000
area of development and maintenance of roads	consulting			12,000			
AREA C – INFORMATION SYSTEMS FOR THE MAN	AGEMENT OI	THE ROA	AD INFRAST	RUCTURE			
C.1. Maintenance standards of roads and highways	workshops	4,000					16,000
,	1.0	1	12000	!			
	consulting		12,000				
C.2. Measurement, collection and management of	workshops		12,000			4,000	16,000
data in the management of road infrastructure			12,000			4,000 12,000	16,000
data in the management of road infrastructure C.3. Development of a standard catalog of public	workshops		4,000				
data in the management of road infrastructure	workshops consulting						16,000
data in the management of road infrastructure C.3. Development of a standard catalog of public services and model architecture of information	workshops consulting workshops consulting	EMENT	4,000				
data in the management of road infrastructure C.3. Development of a standard catalog of public services and model architecture of information systems in the management of road infrastructure AREA D – INNOVATIONS IN ROAD INFRASTRUCT	workshops consulting workshops consulting	MENT	4,000				
data in the management of road infrastructure C.3. Development of a standard catalog of public services and model architecture of information systems in the management of road infrastructure	workshops consulting workshops consulting	MENT	4,000			12,000	
data in the management of road infrastructure C.3. Development of a standard catalog of public services and model architecture of information systems in the management of road infrastructure AREA D – INNOVATIONS IN ROAD INFRASTRUCT D.1. Use of alternative methods of energy production in the management of road infrastructure D.2. BIM Approach (Building Information Modeling)	workshops consulting workshops consulting JRE MANAGE workshops	MENT	4,000			12,000 4,000	16,000
data in the management of road infrastructure C.3. Development of a standard catalog of public services and model architecture of information systems in the management of road infrastructure AREA D – INNOVATIONS IN ROAD INFRASTRUCT D.1. Use of alternative methods of energy production in the management of road infrastructure	workshops consulting workshops consulting JRE MANAGE workshops consulting	MENT	4,000 12,000	12,000		12,000 4,000	16,000
data in the management of road infrastructure C.3. Development of a standard catalog of public services and model architecture of information systems in the management of road infrastructure AREA D – INNOVATIONS IN ROAD INFRASTRUCT D.1. Use of alternative methods of energy production in the management of road infrastructure D.2. BIM Approach (Building Information Modeling) in the context of the needs of the government road administration – analysis of the development of methodology and examples of implementation of	workshops consulting workshops consulting JRE MANAGE workshops consulting workshops	MENT	4,000 12,000	12,000		12,000 4,000	16,000
data in the management of road infrastructure C.3. Development of a standard catalog of public services and model architecture of information systems in the management of road infrastructure AREA D – INNOVATIONS IN ROAD INFRASTRUCT D.1. Use of alternative methods of energy production in the management of road infrastructure D.2. BIM Approach (Building Information Modeling) in the context of the needs of the government road administration – analysis of the development of methodology and examples of implementation of the BIM approach in the government administration	workshops consulting workshops consulting JRE MANAGE workshops consulting workshops	EMENT	4,000 12,000	12,000	4,000	12,000 4,000	16,000
data in the management of road infrastructure C.3. Development of a standard catalog of public services and model architecture of information systems in the management of road infrastructure AREA D – INNOVATIONS IN ROAD INFRASTRUCT D.1. Use of alternative methods of energy production in the management of road infrastructure D.2. BIM Approach (Building Information Modeling) in the context of the needs of the government road administration – analysis of the development of methodology and examples of implementation of the BIM approach in the government administration AREA E - ROAD SAFETY	workshops consulting workshops consulting JRE MANAGE workshops consulting workshops consulting	MENT	4,000 12,000	12,000	4,000	12,000 4,000	16,000
data in the management of road infrastructure C.3. Development of a standard catalog of public services and model architecture of information systems in the management of road infrastructure AREA D – INNOVATIONS IN ROAD INFRASTRUCT D.1. Use of alternative methods of energy production in the management of road infrastructure D.2. BIM Approach (Building Information Modeling) in the context of the needs of the government road administration – analysis of the development of methodology and examples of implementation of the BIM approach in the government administration AREA E - ROAD SAFETY E.1. Evaluation of efficiency of the applied solutions for the road safety - the methodology / measurement standards	workshops consulting workshops consulting Workshops consulting workshops consulting workshops workshops	MENT	4,000 12,000	12,000	4,000	12,000 4,000 12,000	16,000 16,000 16,000
data in the management of road infrastructure C.3. Development of a standard catalog of public services and model architecture of information systems in the management of road infrastructure AREA D – INNOVATIONS IN ROAD INFRASTRUCT D.1. Use of alternative methods of energy production in the management of road infrastructure D.2. BIM Approach (Building Information Modeling) in the context of the needs of the government road administration – analysis of the development of methodology and examples of implementation of the BIM approach in the government administration AREA E - ROAD SAFETY E.1. Evaluation of efficiency of the applied solutions for the road safety - the methodology / measurement	workshops consulting workshops consulting JRE MANAGE workshops consulting workshops consulting workshops consulting	EMENT	4,000 12,000	12,000		12,000 4,000 12,000	16,000

The TEM Project activities shall be financed from different sources, including:

- 1. The yearly contribution from the TEM mS, which would remain the primary source of financing. In the first two years of implementing the Strategic Plan, the level of the contribution shall remain unchanged (7,500 USD per country). The new budget shall be planned in 2019. It will reconsider the necessity to restore the original level of yearly contribution (10.000 USD per country). This shall be preceded by the analysis of the Strategic Plan implementation, the level of financial resources accumulated in the TEM Project account, and the progress in implementing the strategic initiatives.
- 2. The financial resources accumulated in the TEM Project account come from the contributions paid by the TEM mS in the previous years.
- **3.** The paid seminars or workshops for representatives of States not yet participating in the TEM Project, and other institutions involved in road infrastructure management.
- 4. Fundraising.

5. TEM PROJECT STRATEGIC INITIATIVES

Cooperation between countries in the TEM Project can involve a wide range of substantive topics on planning, design, construction or maintenance of road and motorway networks. The challenges for the TEM Project in the context of preparing the Strategic Plan were to:

- > Identify initiatives, which, from the government perspective, are systemic in nature, essential for its operation, and are key to resolving the common challenges for all TEM mS;
- > Define the tasks common to all TEM mS, thus making it possible to address them within the scope of TEM Project;
- > Prioritise individual issues indicated for implementation in the context of schedule for the years 2017-2021;
- > Indicate expected outcomes of individual tasks.

The Strategic Initiatives focus on the identified challenges and on issues that will be essential for TEM mS in the near future. The scope of these initiatives was presented only in general terms. Detailed outputs, resources, activities and implementation methods shall be proposed by TEM mS responsible for implementing the initiative, and adopted by the Steering Committee.

The challenges identified in the Strategic Plan were classified into the following strategic areas:

- > Area A Environmental protection;
- > Area B Organization and financing of the roads and motorways;
- > Area C Information systems for the management of the road infrastructure;
- > Area D Innovations in road infrastructure management;
- > Area E Road safety.

The rest of the Strategic Plan describes Strategic Areas and individual initiatives that will be covered by the TEM Project in the years 2017-2021. For each of the tasks carried out within the area, the Plan presents its scope, potential method of implementation, and expected results of the initiative. Implementation schedule for specific areas is presented in the next section.

5.1. AREA A - ENVIRONMENTAL PROTECTION

No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
A.1.	Evaluation of the efficiency of applied solutions for the protection of the environment - methodology / measurement standards.	The task shall consist in developing methodologies and standards for measuring the efficiency of sustainability solutions. In particular, the scope of the task shall be to determine the following: The extent of measuring the impact of road infrastructure on the environment (e.g. noise level, changes in groundwater); Quantitative or qualitative characteristics to measure in the context of the efficiency of sustainability solutions; Effectiveness measures used to assess the efficiency of sustainability; Frequency of measurements (when, how often, at what stages of the life cycle of the road); How to interpret and use the outcomes of measuring the efficiency of sustainability solutions. The outcome of this task shall be presented to the Inland Transport Committee in form of a report and approved as the official UNECE guidelines in this area.	 Preparation of the report "The methodology and standards for measuring the efficiency of sustainability solutions". Report prepared in collaboration with an external consultant. 	Report "The methodology and standards for measuring the efficiency of sustainability solutions" available on the TEM website.

- Goal 3. Ensure healthy lives and promote well-being for all at all ages.
- **Goal 9**. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- **Goal 15**. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.







TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
Development of standards for road equipment in the context of environmental protection.	The task shall consist in developing an overview of the legal and technical solutions applied by individual states in the context of environmental protection and the development of standards recommended in this regard. In particular, the task shall provide an answer to the following questions:	 Workshop session to present and discuss solutions used in different countries. Report prepared in collaboration with an external consultant. 	 Presentations of solutions from individual states published on the TEM website. Report "The standards of road infrastructure in the context of environmental protection." available
	 What elements of road infrastructure are used in different countries in terms of environmental protection? 		on the TEM website.
	 Do the solutions used in different countries differ from each other depending on the type of road? 		
	 How is the requirement control ensured for road infrastructure in the context of environmental protection? 		
	The task shall lead to developing road infrastructure standards for environmental protection, which will eventually be presented to the Inland Transport Committee and approved as		
	Development of standards for road equipment in the context of environmental	Development of standards for road equipment in the context of environmental protection. The task shall consist in developing an overview of the legal and technical solutions applied by individual states in the context of environmental protection and the development of standards recommended in this regard. In particular, the task shall provide an answer to the following questions: What elements of road infrastructure are used in different countries in terms of environmental protection? Do the solutions used in different countries differ from each other depending on the type of road? How is the requirement control ensured for road infrastructure in the context of environmental protection? The task shall lead to developing road infrastructure standards for environmental protection, which will eventually be presented to the Inland Transport	Development of standards for road equipment in the context of environmental protection. The task shall consist in developing an overview of the legal and technical solutions applied by individual states in the context of environmental protection and the development of standards recommended in this regard. In particular, the task shall provide an answer to the following questions: What elements of road infrastructure are used in different countries in terms of environmental protection? Do the solutions used in different countries differ from each other depending on the type of road? How is the requirement control ensured for road infrastructure in the context of environmental protection? The task shall lead to developing road infrastructure standards for environmental protection, which will eventually be presented to the Inland Transport Committee and approved as

- Goal 3. Ensure healthy lives and promote well-being for all at all ages.
- **Goal 9**. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- **Goal 15**. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.







5.2. AREA B - ORGANIZATION AND FINANCING OF THE ROADS AND MOTORWAYS

No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
No. B.1.		The task shall consist in developing a review of the legal and organizational solutions comprising the models of governance and financing of public roads applied in individual states. In particular, the task shall cover the following: • Review of solutions and public revenue financing models applied in different member States to uphold the road infrastructure; • Review of practices and organizational solutions in the context of NRA in individual countries, with emphasis on: a. Organizational and legal forms, including special purpose vehicles for NRA, b. Distribution of responsibilities on the ministerial and administrative levels, c. Financing methods of NRA activities;	Workshop session to present and discuss solutions used in different countries. Report prepared in collaboration with an external consultant.	Presentations of solutions from individual states published on the TEM website. Report "The functioning and financing of national road infrastructure management systems – models, and organizational and financial solutions" available on the TEM website.
		Review of practices and organizational solutions applied in individual countries for the collection and settlement of toll charges for the use of the road network.		

Related Sustainable Development Goals:

Goal 10. Reduce inequality within and among countries.

Goal 12. Ensure sustainable consumption and production patterns.





No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
B.2.	Evaluation of the efficiency of toll collection system – evaluation methodology.	The task shall consist in developing the methodology and guidelines for measuring the effectiveness of the toll collection system. The methodology shall take into account in particular: Types of toll systems used in individual states; The toll system efficiency measuring method depending on the model, and taking into account both financial and quality issues, such as risk control systems, implementation difficulty, technology development etc.; Comparison of toll systems in terms of efficiency. The results of the task shall be presented to the Inland Transport Committee in form of a report and approved as the official UNECE guidelines on this subject.	 Preparation of the report "The methodology for measuring the efficiency of the toll collection system". Report prepared in collaboration with an external consultant. 	Report "The methodology for measuring the efficiency of the toll collection system" available on the TEM website.

Goal 10. Reduce inequality within and among countries.

Goal 12. Ensure sustainable consumption and production patterns.





No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
B.3.	Conditions for creating an efficient PPP in the area of development and maintenance of roads.	The task shall consist in developing a review of organizational, financial and legal matters related to the functioning of the PPP in the area of development and maintenance of roads. In particular, the scope of the task shall apply to the preparation of a report presenting: • Advantages and disadvantages of PPPs from a perspective of a public partner; • Risks of PPP in the context of a public partner and the methods of protection of public interest in PPP projects; • Conditions necessary to ensure the efficiency of PPP projects from the perspective of a public partner; • Examples of efficient PPPs in the development and maintenance of roads and motorways.	 The task can be carried out in cooperation with a financial advisor and legal counsel. The task shall be realized in the form of a special workshop for the MS. 	 Workshop materials published on the TEM website. Report "Best practices for government administration in the field of PPP in the development and maintenance of roads" available on the TEM website.

Goal 10. Reduce inequality within and among countries.

Goal 12. Ensure sustainable consumption and production patterns.



5.3. AREAC-INFORMATION SYSTEMS FOR THE MANAGEMENT OF THE ROAD IN FRASTRUCTURE

No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
C.1.	Maintenance standards for roads and highways.	The task shall consist in developing standards for the maintenance of roads and motorways, which will be eventually presented to the Inland Transport Committee and approved as the official UNCEC guidelines on this subject. The scope of the task shall provide answers to the following questions: Is it possible to develop standards for the maintenance of roads and motorways? Should the standards be different depending on the type of the road (e.g. different for expressway and different for motorway)?	 Workshop session to present and discuss solutions used in different states. Guidelines for standards of maintenance of roads and motorways. The task can be carried out in cooperation with an external consultant. 	 Presentations of solutions individual states available on the TEM website. Report "Standards for the maintenance of roads and motorways" published on the TEM website.

- Goal 3. Ensure healthy lives and promote well-being for all at all ages.
- Goal 10. Reduce inequality within and among countries.
- Goal 12. Ensure sustainable consumption and production patterns.
- **Goal 15**. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.









No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
C.2.	Measurement, collection and management of data in the management of road infrastructure.	The task shall consist in analysing and developing guidelines on the measurement and processing of data necessary for management of road infrastructure, including in particular: Data necessary for wealth management; Data necessary to evaluate the impact of the network of roads and motorways on the environment; Methods of processing the above-mentioned data within the business intelligence systems. The task shall conclude a report which shall be presented by TEM and recommended to the Inland Transport Committee as the official UNECE guidelines in this area.	 Preparation of the report "Recommendations for the management of data in terms of road infrastructure management." Report prepared in collaboration with an external consultant. 	Material for illustration report "Recommendations for the management of data in terms of management of road infrastructure" available on the TEM website.

- **Goal 9**. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- Goal 10. Reduce inequality within and among countries.
- Goal 12. Ensure sustainable consumption and production patterns.







No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
C.3.	Development of a standard catalogue of public services and model architecture of information systems in the management of road infrastructure.	The task shall consist in analysing and developing model architecture systems used in the management of road infrastructure. In particular, the task shall cover the following: • Analysis of the catalogue of IT services provided by the member States; • Analysis of the current business architecture of operating systems in the member States; • Preparation of a standard catalogue of services provided by the ITS systems supporting the management of road infrastructure; • Development of a standard business architecture for IT systems to support the management of road infrastructure.	 Workshop session to present and discuss solutions used in different states. Internship in the scope of the catalogue of services and business architecture of IT systems. The task can be carried out in cooperation with an external consultant. 	Report "Catalogue of public services and model architecture of IT systems in the management of road infrastructure – overview of practices and recommendations" available on the TEM website.

- **Goal 9**. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- **Goal 10**. Reduce inequality within and among countries.
- **Goal 12**. Ensure sustainable consumption and production patterns.







5.4. AREA D - INNOVATIONS IN ROAD INFRASTRUCTURE MANAGEMENT

No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
D.1.	Use of alternative methods of energy production in the management of road infrastructure.	The task shall consist in the exchange of knowledge and member States becoming familiar with alternative energy sources that can be used with the planned or existing road infrastructure.	 Workshop session to present and discuss solutions used in different states. Workshop session can be carried out in cooperation with representatives of non-governmental organizations, research and external advisors, specializing in alternative energy sources. 	 Presentations of solutions from individual states available on the TEM website. Report "Alternative energy sources in the management of road infrastructure".

- **Goal 7**. Ensure access to affordable, reliable, sustainable and modern energy for all.
- **Goal 9**. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- **Goal 10**. Reduce inequality within and among countries.
- **Goal 12**. Ensure sustainable consumption and production patterns.











No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
D.2.	BIM Approach (Building Information Modelling) in the context of the needs of the government road administration – analysis of the development of methodology and examples of implementation of the BIM approach in the government administration.	The task shall consist in TEM mS becoming familiar with the progress in the development of methods and tools for the BIM and the application of this method in road administration of the selected states.	 Workshop session to present and discuss the development of methods and tools related to the BIM with case studies from the selected states. Workshop session can be carried out in cooperation with representatives of non-governmental organizations, research and external advisors, specializing in BIM. 	Report "The use of BIM in the management of road infrastructure", published on the TEM website.

- **Goal 9**. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- Goal 10. Reduce inequality within and among countries.
- **Goal 12**. Ensure sustainable consumption and production patterns.









5.5. AREA E – ROAD SAFETY

No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
E.1.	Evaluation of the efficiency of applied solutions for the road safety - methodology / measurement standards.	The task shall consist in developing methodologies and standards for measuring the efficiency of road safety solutions. In particular, the task shall focus on the following: The extent of measuring the impact of road infrastructure on the environment; Quantitative or qualitative characteristics to measure in the context of the efficiency of road safety solutions; Effectiveness measures used to assess the effectiveness of the road safety solutions; Frequency of measurements (when, how often, at what stages of the life cycle of the road); How to interpret and use the outcomes of measuring the efficiency of road safety solutions. The outcome of this task shall be presented to the Inland Transport Committee in form of a report and approved as the official UNECE guidelines on this subject.	 Preparation of the report "The methodology and standards for measuring the effectiveness of road safety solutions." Report prepared in collaboration with an external consultant. 	Report "The methodology and standards for measuring the effectiveness of road safety solutions", available on the TEM website.

Related Sustainable Development Goals:

Goal 3. Ensure healthy lives and promote well-being for all at all ages.

 $\textbf{Goal 9}. \ \textbf{Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.}$





No.	TASK DESCRIPTION	SCOPE OF THE TASK	REALIZATION METHOD	RESULT
E 2	ifety standards work zones.	The task shall consist in developing an overview of the legal and technical solutions applied by individual states in the context of work zones, and creating standards recommended in this regard. In particular, the task shall provide answers to the following questions: • What elements of the traffic management system and road infrastructure are used/required in different states in terms of work zones safety? • Do the solutions used in different states differ from each other? • What are the legal or operational tools used to ensure compliance with the requirements in the context of work zones safety standards? The task shall lead to the development of safety standards for work zones, which will eventually be presented to the Inland Transport Committee and approved as the official UNECE guidelines on this subject.	 Workshop sessions to present and discuss solutions used in different states. Report prepared in collaboration with an external consultant. 	Presentations of solutions used in individual countries published on the TEM website. "The standards of road work zones" report published on the TEM website.

Goal 3. Ensure healthy lives and promote well-being for all at all ages.

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.





6. THE STRATEGIC PLAN IMPLEMENTATION TIMETABLE

The implementation timeframe for the Strategic Plan has been prepared on the assumption that the implementation of the Strategic Initiatives will begin in 2017. The new Trust Fund Agreement Attachment 1, 2017-2021, and organizational measures shall be ready by the end of 2016 as well as:

- > Arrangements for the composition of the new bodies of the Project;
- > Arrangements for the detailed implementation method of the initiatives planned for 2017;
- > Discussions around the principles and mode of action related to the accession of new countries.

Table 2 - The Strategic Plan implementation

ACTIVITIES	ТҮРЕ	2017	2018	2019	2020	2021
AREA A - ENVIRONMENTAL PROTECTION						
A.1. Evaluation of efficiency of the applied solutions for the protection of the environment - the methodology /	workshops			*		
measurement standards	report			*		
A.2. Development of standards for road equipment in the	workshops			*		
context of environmental protection	report				*	
AREA B – ORGANIZATION AND FINANCING OF THE ROADS AN	D MOTORWAY	rs .		i		
B.1. Functioning and financing of the national road	workshops	*				
infrastructure management – solutions used in different states	report		*			
B.2. Evaluation of the efficiency of toll collection system –	workshops				*	
evaluation methodology	report				*	
B.3. Conditions for creating an efficient PPP in the area of development and maintenance of roads	workshops		*	*		
AREA C – INFORMATION SYSTEMS FOR THE MANAGEMENT OF	report	ED A CEDIA	CTUDE			
AREA C - INFORMATION STSTEMS FOR THE MANAGEMENT OF	1	FRASTRU	CIURE			
C.1. Maintenance standards of roads and highways	workshops		*			
C3 Management and action and accompany of data in the	report workshops					*
C.2. Measurement, collection and management of data in the management of road infrastructure	report					*
C.3. Development of a standard catalog of public services and	workshops		*			
model architecture of information systems in the management of road infrastructure	report		*			
AREA D – INNOVATIONS IN ROAD INFRASTRUCTURE MANAGE	MENT	:		:		
D.1. Use of alternative methods of energy production in the	workshops					*
management of road infrastructure	report					*
D.2. BIM Approach (Building Information Modeling) in the context of the needs of the government road administration – analysis of the development of methodology and examples	workshops		*			
of implementation of the BIM approach in the government administration	report			*		
AREA E - ROAD SAFETY						
E.1. Evaluation of efficiency of the applied solutions for the	workshops				*	
road safety - the methodology / measurement standards	report					*
E.2. Safety standards in work zone	workshops				*	
Liz. Surcey standards in Work Zolle	report					*

APPENDIX - CURRENT TEM PROJECT MEMBER STATES

- > Armenia;
- > Austria (associate member);
- > Bosnia and Herzegovina;
- > Bulgaria;
- > Croatia;
- > Czech Republic;
- > Georgia (membership frozen);
- > Greece (membership frozen);
- > Italy (membership frozen);
- > Lithuania;
- > Poland;
- > Romania;
- > Slovakia (membership frozen);
- > Slovenia;
- > Turkey.
- Four other countries have an observer status: Montenegro, Serbia, Sweden and Ukraine.
- Azerbaijan's membership is pending, awaiting signature for accession.



UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

TEM Project Strategic Plan

The TEM Project was established in 1977 as a regional transport cooperation initiative for the Central and Eastern European countries. Its main objectives are: (i) to facilitate road traffic in Europe; (ii) to improve the quality and efficiency of transport operations; (iii) to balance existing gaps and disparities between motorway networks in Western, Eastern, Central and South-Eastern Europe; and (iv) to assist the integration process of European transport infrastructure systems.

The most important initiatives implemented within recent years were:

- The TEM and TER Master Plan and its revised version, focused mainly on the existing TEM Backbone Network and planned investments in TEM Project member States (TEM mS);
- TEM Standards and Recommended Practice a summary of user requirements, know-how and achievements in the design, construction and maintenance of motorways.

TEM Project Strategic Plan 2017 – 2021 is a road map for the implementation of the TEM Project for 2017 – 2021.

The Strategic Plan 2017 – 2021 value proposition:

- The TEM Project aims to support UNECE and the Inland Transport Committee in pursuing the Sustainable Development Goals related to road infrastructure management;
- TEM Project will interpret and translate the Sustainable Development Goals into the Strategic Initiatives.

The Strategic Initiatives focus on the identified challenges and on issues that will be essential for TEM mS in the near future. The challenges identified in the Strategic Plan were classified into the following strategic areas:

- Area A Environmental protection;
- Area B Organization and financing of the roads and motorways;
- Area C Information systems for the management of the road infrastructure;
- Area D Innovations in road infrastructure management;
- Area E Road safety.

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