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**ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE

Working Party on Road Transport

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**ROAD TRANSPORT INFRASTRUCTURE**

**Trans-European North-South Motorway (TEM) Project – Progress Report**

Note by the Project Manager

1. The Trans-European North-South Motorway (TEM) is an international motorway and expressway network connecting the Baltic, Adriatic, Aegean and Black Seas.
2. In the Project, thirteen Central Eastern and Southern Eastern European countries (Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Italy, Lithuania, Poland, Romania, Slovakia and Turkey) participate and with it three more countries – Sweden, Ukraine and Serbia and Montenegro – have an observer status.
3. Its high-capacity, double and grade-separated carriageways, each with a minimum of two traffic lanes will ensure an adequate quality of services for modern traffic by providing for safety, speed and comfort in accordance with commonly adopted standards, thus contributing to the economic and social development of the whole European continent.
4. The United Nations Economic Commission for Europe is its Executing Agency, responsible for technical and administrative backstopping of the Project and the coordination of its activities.

5. The total planned length of the TEM network as of 1 January 2004 was 23,389 km, out of which 9978 km were in operation and 1025 km under construction (Annex 1). The schematic map of the TEM Network 2004 is attached to this report as Annex 4.
6. Taking into account the corresponding comparative indicators (last three columns of Annex 1), Turkey had the highest percentage of the TEM network length (29.6%), Croatia had the fastest construction pace (18.8% of its national TEM network under construction) and Italy had the highest degree of completion of its TEM network (99.7%). In total, 42.7% of the whole TEM network was in operation and 4.4% of its length was under construction.
7. Pending total completion, nevertheless, TEM is already an operational reality because of the TEM Corridor, which consists of upgraded national roads linking the already constructed motorway sections.
8. The main objectives set for the Project are:
  - (a) To assist the participating countries in accelerating the construction of the TEM network through the identification of investment needs and priorities, investigation of financial resources needed for its construction and determination of appropriate payback systems for use on the TEM motorway.
  - (b) To assist in designing, building, maintaining, operating and administering the TEM motorway network on the territories of participating countries as part of an integrated European transport infrastructure, thus filling the gaps in the existing motorway network in the region.
  - (c) To pay special attention, in view of present economic constraints, to the upgrading of existing roads and to envisage the stage construction of motorways.
  - (d) To promote and improve cooperation in all matters concerning road transport between TEM countries having different levels of development.
  - (e) To continue to disseminate the knowledge, expertise and know-how developed so far in the TEM region to other regions of the world.
9. In the whole period of 27 years during which the TEM Project has been underway, an efficient type of co-operation and understanding has been established between the respective motorway and/or highway authorities of the participating countries, together with the Project's institutional framework and organizational structure.
10. The highest decision-making body of the TEM Project is the Steering Committee, which meets twice a year, determines the policy of the Project as well as the general measures to be taken concerning TEM activities, and takes decisions for common action.

11. The TEM Steering Committee held its last (forty-first) session on 31 May-2 June 2004 in Antalya, Turkey. The next (forty-second) session of the Committee will be held on 29 November-1 December this year in Geneva.
12. The Project has a Project Central Office (PCO) set up to coordinate all the activities carried out under the terms of the Programme of Work. It operates under the direction of the Steering Committee and under guidance from the Economic Commission for Europe. The PCO is located in Warsaw and the Polish Government covers office expenses.
13. The Project Central Office is headed by the Project Manager. The past TEM Project Managers were made available by the Governments of Greece, Turkey, Romania, former Czechoslovakia, Slovakia and the Czech Republic, respectively. The present Project Manager has been provided by the Government of Slovakia with an assignment until 31 December 2005.
14. The TEM has a National Coordinator in each participating country appointed by the respective Government, responsible for the coordination of all Project activities within the country.
15. The funding of all Project activities in-kind as well as in cash is provided exclusively by the participating countries. In this respect, the TEM Cooperation Trust Fund has been established, based on the Trust Fund Agreement signed in Geneva in December 1991. According to this Agreement, each participating country contributes USD 7,500 annually to the Project in addition to its in-kind contribution. In view of the fact that the annual contribution of USD 7,500 was set in 1992 and since then, inflation, US dollar depreciation and increased project activities have negatively affected the operating costs of the Project, the last Steering Committee held in Antalya adopted an UNECE proposal for an exceptional contribution of every participating Government amounting to USD 2,500 (totally USD 32,500) within the year 2004 budget. Under the terms of the Agreement, the UNECE is responsible for the management of the funds contributed in cash. As a result of this, the Project has a well established and permanent arrangement for the continuous administration and co-ordination of its technical, managerial and economic activities.
16. According to the financial report for 2003, approved by the forty-first session of the TEM Steering Committee, the total funds available in the year 2003 amounted to USD 103,801 with total expenditures (including UNECE Programme support costs) representing USD 87,979, resulting in a total unencumbered positive balance as at 31 December 2003 amounting to USD 15,822.
17. The TEM Programme of Work and adjusted budget for 2004, based on the provisions of the Trust Fund Agreement and approved by the fortieth session of the TEM Steering Committee (12-14 November 2003, Trieste) and forty-first session of the TEM Steering Committee (31 May-2 June 2004, Antalya) are attached to this report as its Annexes 2 and 3.
18. Besides the co-operation and assistance activities of the Project regarding the acceleration of TEM construction itself, the TEM Project performs the piloting function in private sector funding of motorway and road construction and maintenance, focusing on the legal framework for building

motorways with foreign credits and concession systems, evaluation of payback systems, including conditions for the application of motorway tolls, investigation and/or development of issues for assessing Public Private Partnership arrangements and technical assistance in the areas of private financing of motorways.

19. In the recent period, the scope of technology and know-how transfer in the framework of the TEM has also widened, going from motorway design, construction and operation to the broader field of common motorway and road issues, such as pavement and bridge management, environmental impact assessment, standardization, harmonization of signing, introduction of intelligent transport systems, etc. The forms, tools and techniques used in technology transfer within the TEM vary according to the aim and type of respective activities. They include seminars, workshops and round tables usually organized by one member country jointly with the TEM Project Central Office in accordance with the annual programme of work, often in collaboration with one or more non-TEM institutions or consultants.

20. These transfer and technical assistance activities have also included valuable inputs from other OECD countries, especially from the countries of the European Union and the United States of America. Within the multitude of technology transfer programmes directed now to Central and Eastern European countries, the TEM is unique in that it deals not only with the transfer from the more developed Western countries to the region, but also with the technology transfer, coordination and exchange of experience and know-how between the participating countries of the region themselves. The technical potential amassed, in terms of experts trained, also constitutes a substantial resource now possessed by the TEM Project, which can be capitalized on in other regions.

21. The TEM Project collaborates with international organizations dealing with transport issues, especially with the respective Directorates General of the Commission of the European Union, European Conference of Ministers of Transport, OECD Transport Division, CEI (Central European Initiative), WERD (Western European Road Directors), US-based HEEP (Highway Engineering Exchange Program), UN/TER Project Central Office in Budapest, International Road Transport Union (IRU), International Road Federation (IRF) and the European Association of Companies with Concessions for Motorway, Bridge and Tunnel Tolls (ASECAP).

22. In the reporting period, also the involvement of the TEM PCO in the monitoring of the development of Pan-European Transport Corridors went on and was manifested inter alia by the presence of the TEM Project Manager and his Deputy in the meeting of the Steering Committee of Corridor VI, on behalf of its Secretariat, held in Ostrava, Czech Republic on 24 November 2003 and in the meeting of the Steering Committee of Corridor III held in Kiev, Ukraine on 23-24 June 2004.

23. Moreover, the TEM Project Manager participated in the 6<sup>th</sup> meeting of the Corridors and Areas Co-ordinators Group held in Brussels on 15 March 2004 and attended the International

conference “Bottlenecks of the future infrastructure connection between the Slovak Republic and Poland” (Corridor VI) held in Bielsko Biala, Poland on 22-23 January 2004.

24. The TEMSTAT database and mapping activity was successfully developed in the course of the reporting period. On 18-19 March 2004, the TEMSTAT Data Collection and Mapping Meeting coupled with the Meeting of TEM and CEDR (Conference of European Directors of Roads) Subgroup Road Data representatives was held in Prague, Czech Republic, in which experts of 11 TEM member countries took part. In the meeting, the TEM Status data and TEMSTAT 1 and 2 data for 2004 were transferred to the TEM PCO to be used for elaboration of the TEM Status report, country and regional maps as well as for elaboration of the TEM Master Plan.

25. The TEMSTAT database represents the basic input to the TEM ArcView mapping programme, consisting of infrastructure status regional and country maps, traffic flow maps and TEM Master Plan maps presenting the envisaged network development until the year 2020.

26. In November 1993, with FHWA’s and HEEP’s financial and technical support, the TEM/HEEP Area V (Central Eastern Europe) was inaugurated as the first one in Europe. HEEP is a non-profit association in charge of promoting free exchange of computer programmes, systems and concepts between its members in the fields of civil engineering, transportation and management with the aim of increasing the effectiveness of computer usage. The establishment of the HEEP Area V provided TEM participating countries and their software experts with free access to the latest developments in highway electronic engineering.

27. The TEM/HEEP Area V 2004 Annual Meeting was held in Liptovsky Jan, Slovakia on 17-19 May 2004. In the framework of the HEEP Educator and Student Participation Programme, one student from the Technical University of Bratislava was granted a scholarship to present a report on his research achievements at the 2004 HEEP Annual International Conference to be held in Lincoln, Nebraska, USA in September 2004.

28. In the reporting period, the already very close cooperation of the TEM Project Central Office with the UNECE further intensified. The Project Manager participated in the 66<sup>th</sup> session of the UNECE Inland Transport Committee held on 17-19 February 2004 and in the meeting of Working Party on Transport Statistics which took place on 9-11 June this year in Geneva. The TEM Deputy Project Manager as a member of the UNECE Ad hoc Multidisciplinary Group of Experts on Safety in Tunnels took part in the seventh session of this Group held in Barcelona, Spain on 19-20 January 2004.

29. The meeting of the TEM Permanent Table on Development and Coordination of Motorway Construction and Operation in the South-Western Region was held in Trieste on 11 November 2003, in which the delegates of 4 countries as well as the UNECE, Central European Initiative and the TEM PCO participated. It should be noted in this context, that the Government of Italy in close

collaboration with the authorities of the Italian region of Friuli-Venezia Giulia is establishing the Intermodal Transport Centre in Trieste to be used also for UNECE and TEM Project purposes.

30. The practical implementation of the Memorandum of Understanding between UNECE and ASECAP (European Association of Companies with Concessions for Motorway, Bridge and Tunnel Tolls) regarding collaboration with the TEM Project continued by the attendance of the representatives of 10 TEM countries, the TEM Project Manager and his Deputy at the TEM/ASECAP/ASFINAG (Austrian Company for Motorway and Expressway Financing) Liaison Office Workshop on Electronic Fee Collection as a Proper Method of Financing, which took place in Vienna, Austria on 29 March 2004. Furthermore, on invitation of the organizers, the Project Manager also took part in the ASECAP Study and Information Days 2004 in Vilamoura, Portugal on 24 May 2004.

31. At the thirty-ninth session of the TEM Steering Committee, the revised TEM Master Plan Terms of Reference, representing one of the most important outcomes of the TEM Short-term Strategy were approved. The Master Plan aims at the elaboration of a strategic plan of actions for the implementation of TEM Project objectives in terms of updated and prioritized road transport infrastructure needs of the TEM member countries i.e. (1) identification of investment priorities, (2) establishment of a timetable for their realization, (3) assessment of costs involved and of appropriate financing arrangements. In order to secure the necessary continuity of the TEM network to the neighbouring countries, it was proposed that the TEM Master Plan should cover also 8 non-TEM countries (Belarus, FYROM, Greece, Republic of Moldova, Russian Federation, Serbia and Montenegro, Slovenia, Ukraine). Thanks to the kind contribution of the International Road Transport Union (IRU) amounting to 100,000 Swiss francs, the elaboration of the TEM Master Plan (broken down into 10 Work Packages) started in September 2003 and its termination is planned for the end of October 2004. Till now, the TEM Project Manager and his Deputy have taken part in three meetings (Budapest, Warsaw, Geneva) of the Coordination Group for the TEM and TER Master Plans chaired by the UNECE. Moreover, the first Meeting of the Experts Group for the TEM Master Plan was organized in Bratislava, Slovakia on 9 February 2004. Preliminary information and recommendations regarding the TEM Master Plan can be found on the UNECE website: [www.unece.org/trans](http://www.unece.org/trans)

32. In the reporting period, collaboration with the TER Project Central Office in Budapest, established in 1991, continued. The collaboration concentrated mostly on the administration of both Projects, on the possibilities of cooperation with the European Commission in activities having multimodal scope and on the coordination of all matters concerning the elaboration of the TEM and TER Master Plans.

Annex 1

**STATUS OF TEM NETWORK (as of 1.01.2004)**

COUNTRY	Total length	PROGRAMMED (in study, preliminary design and design phases)		UNDER CONSTRUCTION		IN OPERATION		COMPARATIVE INDICATORS		
	km	one carriageway	Both carriageways	one carriageway	both carriageways	one carriageway	both carriageways	% of total TEM length	CONSTRUCTION PROGRESS (% of length under construction)	DEGREE OF COMPLETION (% of length in operation)
Column No.	1	2	3	4	5	6	7	8	9	10
AUSTRIA	485	19	36	16	-	35	414	2.1	1.6	89.0
BOSNIA and HERZEGOVINA	331	-	319	-	-	-	12	1.4	-	3.6
BULGARIA	925	-	617	-	15	19	274	3.9	1.6	30.7
CROATIA	1465	311	564	36	257	101	420	6.3	18.8	32.1
CZECH REPUBLIC	987	-	414	8	30	8	535	4.2	3.4	54.6
GEORGIA	1053	-	1045	-	-	-	8	4.5	-	0.8
HUNGARY	1658	653	377	20	52	34	522	7.1	3.7	32.5
ITALY	1519	-	-	-	4	-	1515	6.5	0.3	99.7
LITHUANIA	731	204	12	-	-	254	466	3.1	-	81.1
POLAND	3383	425	2247	-	83	86	542	14.4	2.5	17.3
ROMANIA	2983	-	2735	-	134	-	114	12.8	4.5	3.8
SLOVAKIA	948	-	487	23	77	588	348	4.1	9.5	68.6
TURKEY	6921	-	378	-	321	3954	2268	29.6	4.6	61.3
<b>TOTAL</b>	<b>23389</b>	<b>1612</b>	<b>9231</b>	<b>103</b>	<b>973</b>	<b>5079</b>	<b>7438</b>	<b>100.00</b>	<b>4.4</b>	<b>42.7</b>

Annex 2

TRANS-EUROPEAN NORTH-SOUTH MOTORWAY (TEM)  
 PROJECT PROGRAMME OF WORK FOR THE YEAR 2004

Objective		Activity		Action	Implemented by	2004			
No.	Description	No. Priority	Description			I	II	III	IV
1.	Updating of TEM network, acceleration of its construction and review of TEM priorities	1.1. <b>I.</b>	Elaboration of the TEM Master Plan aiming at covering the identified priority needs	1.1.1. Attaining maximum compatibility between TEM network, Pan-European Transport Corridors and TINA network	PCO Governments	*	*	*	
				1.1.2. Preparation of updated maps of TEM network and traffic, alignments and dynamism towards neighbouring regions, incorporating intermodality and truck and coach traffic	PCO	*	*	*	
				1.1.3. Review of bottlenecks, missing links and other priority transport infrastructure needs on main TEM road corridors in the framework of the TEM Master Plan	PCO Governments UNECE	*	*	*	

Objective		Activity		Action	Implemented by	2004			
No.	Description	No. <u>Priority</u>	Description			I	II	III	IV
				1.1.4. Investigation of alternative links within the TEM region incorporating intermodal approach and formulating proposals for their possible implementation	PCO Governments	*	*	*	
				1.1.5. Meetings of the TEM/TER Master Plans Coordination Group	UNECE PCO Consultants		*	*	
				1.1.6. Meetings of the TEM Master Plan Expert Group	UNECE PCO Governments Consultants	*	*		
				1.1.7. Elaboration of TEM Master Plan final document				*	
				1.1.8. Submission and approval of the TEM Master Plan by S.C.	PCO				*
				1.1.9. Selection of follow-up actions and supporting their implementation with involvement of TEM in finding financial means	PCO Governments				*

Objective		Activity		Action	Implemented by	2004			
No.	Description	No. <u>Priority</u>	Description			I	II	III	IV
				1.1.10. Public awareness actions and dissemination of Master Plan results	UNECE PCO Governments	*	*	*	*
		1.2. <b>I.</b>	TEM Integration in the new European Transport Environment	1.2.1. Strengthening TEM as monitoring and management instrument of Pan-European Corridors development	UNECE PCO Governments	*	*	*	*
				1.2.2. Carrying out the function of secretariat of the Pan-European Transport Corridor VI	PCO Poland	*	*	*	*
		1.3. <b>I.</b>	TEM construction	1.3.1. Follow-up of the meeting on motorway stage construction	PCO Governments	*	*	*	*
2.	Promotion of TEM	2.1. <b>I.</b>	Development of new contacts and relationships with neighbouring countries aiming at their joining the Project	2.1.1. Contacts of ECE and PCO representatives to countries in line with the TEM Trust Fund Agreement to discuss the possibilities and conditions of their joining TEM	UNECE PCO	*	*	*	*
				2.1.2. Bilateral and multilateral contacts between neighbouring countries encouraged and supported by PCO	PCO Governments	*	*	*	*

Objective		Activity		Action	Implemented by	2004			
No.	Description	No. Priority	Description			I	II	III	IV
		2.2. <b>I.</b>	Providing information on TEM: information brochure, international events, mass media information, etc.	2.2.1. Regular dispatching of press releases and providing other type of information related to Project's actions	UNECE PCO	*	*	*	*
				2.2.2. Disseminating all information about the Project within the countries	Governments	*	*	*	*
				2.2.3. Permanent updating of TEM Project webpage within the UNECE website	UNECE PCO	*	*	*	*
				2.2.4. Printing and distribution of TEM 2004 brochure	PCO			*	
				2.2.5. Distribution of TEM brochure	UNECE PCO			*	
				2.2.6. Feedback members with TEM news	PCO	*	*	*	*
				2.2.7. Presence in European Transport fora	PCO Governments	*	*	*	*

Objective		Activity		Action	Implemented by	2004			
No.	Description	No. Priority	Description			I	II	III	IV
				2.2.8. Organisation/participation in regional and national events to present the Project	PCO Governments	*	*	*	*
				2.2.9 Strengthening TEM PCO by securing more financial and human resources	UNECE Governments	*	*	*	*
3.	Ensuring safe, sustainable and homogeneous driving conditions on TEM by assisting in TEM design, maintenance, operation and management	3.1. <b>II.</b>	Harmonisation of motorway signing	3.1.1. Participation in the work of the ECE Working Party on Road Traffic Safety (WP.1)	UNECE PCO	*	*	*	*
		3.2. <b>I.</b>	TEM information systems	3.2.1. Performing HEEP Area V regular activities	PCO Slovakia		*		
				3.2.2. Data processing of TEMSTAT databases	PCO	*		*	
				3.2.3. Meeting of TEMSTAT contact persons	PCO Governments		*		

Objective		Activity		Action	Implemented by	2004			
No.	Description	No. Priority	Description			I	II	III	IV
		3.3 <b>II.</b>	TEM Permanent Table on Development and Coordination of Motorway Construction and Operation in the TEM South-western region	3.3.1. Regular meeting of the Permanent Table	PCO Austria Bosnia and Herzegovina Croatia Hungary Italy Slovakia				*
				3.3.2. Joint promotion of the Project for possible funding from EU sources	UNECE PCO Governments involved	*	*	*	*
				3.3.3. Meeting of the Working Group of the Permanent Table	PCO Governments involved		*		
4.	TEM integration into Pan European transport environment	4.1. <b>I.</b>	Co-operation with respective EC bodies and other EU states' organisations and institutions	4.1.1. Institutional co-operation with EC DG TREN, REGIO, ENLARGEMENT	UNECE PCO	*	*	*	*
				4.1.2. Co-operation with CEI (Central European Initiative) in transport related activities of common interest	UNECE PCO respective Governments	*	*	*	*

Objective		Activity		Action	Implemented by	2004			
No.	Description	No. Priority	Description			I	II	III	IV
				4.1.3. Establishment of regular dialogue and co-operation with non-Governmental Organisations (IRU, CEDR, Europlatforms, ASECAP, Eurochambres), Universities and Research Institutions	UNECE PCO Governments Related organizations	*	*	*	*
				4.1.4 Promotion of TEM Standards and Recommended Practice	UNECE PCO Governments	*	*	*	*
		4.2. <b>I.</b>	Co-operation with other countries and fora	4.2.1. Development of close co-operation with other related initiatives and projects (TINA Successors, BSEC, OECD,ECMT, etc.)	UNECE PCO	*	*	*	*
				4.2.2. Development of contacts aiming at investigating possibilities of co-operation with European NGOs	UNECE PCO	*	*	*	*
				4.2.3. Connection of TEM plans to other components of the network (rail, sea ports, inland ports, airports)	UNECE PCO Governments				*

Objective		Activity		Action	Implemented by	2004			
No.	Description	No. Priority	Description			I	II	III	IV
				4.2.4. Identification of connections of TEM network to the transport networks of neighbouring regions	UNECE PCO			*	*
				4.2.5. Involvement of TEM in application of new technologies & techniques (ITS, telematics, informatics, etc.)	UNECE PCO Governments	*	*	*	*
5.	Project management enhancement	5.1. <b>I.</b>	Steering Committee activities	5.1.1. Regular sessions	UNECE PCO Governments		*		*
		5.2. <b>I.</b>	Co-operation with UNECE	5.2.1. Continuation and further strengthening of co-operation with UNECE ITC and its subsidiary bodies	UNECE PCO Governments	*	*	*	*
		5.3. <b>I.</b>	Co-operation among TEM countries in all matters concerning road transport	5.3.1. Contacting the Governments with respect to their needs	PCO Governments	*	*	*	*

Annex 3

**PROPOSED SUPPLEMENTARY BUDGET  
TO THE TEM PROJECT BUDGET FOR THE YEAR 2004, in US \$**

<b>BUDGET LINE</b>	<b><u>Proposed</u> Supplementary Budget</b>	<b><u>Prior</u> (Approved) Budget</b>	<b>TOTAL OF PROPOSED NEW BUDGET</b>
<b>PROJECT PERSONNEL</b>			
11.01 Project Manager	-	6,060	6,060
11.03 Consultants	-	-	-
13.00 Admin. Support	<b>1,600</b>	2,400	4,000
15.00 Official Travel	<b>5,000</b>	27,300	32,300
16.00 Mission Costs	<b>3,000</b>	1,500	4,500
<b>19.00 COMPONENT TOTAL</b>	<b>9,600</b>	37,260	46,860
<b>SUB-CONTRACT</b>			
21.00 Sub-contract	-	-	-
<b>29.00 COMPONENT TOTAL</b>	-	-	-
<b>TRAINING</b>			
32.00 Group Training	<b>7,000</b>	21,000	28,000
<b>39.00 COMPONENT TOTAL</b>	<b>7,000</b>	21,000	28,000
<b>EQUIPMENT</b>			
42.00 Non-expendable	<b>3,000</b>	7,000	10,000
<b>49.00 COMPONENT TOTAL</b>	<b>3,000</b>	7,000	10,000
<b>MISCELLANEOUS</b>			
51.00 Maintenance & Oper.	<b>1,120</b>	1,020	2,140
53.00 Sundry	<b>8,000</b>	20,000	28,000
<b>59.00 COMPONENT TOTAL</b>	<b>9,120</b>	21,020	30,140
<b>PROGRAMME SUPPORT</b>	<b>3,780</b>	11,220	15,000
<b>PROJECT TOTAL</b>	<b>32,500</b>	<b>97,500</b>	<b>130,000</b>

It is expected that the proposed supplementary budget of US \$ 32,500 be covered by an **exceptional contribution of US \$ 2,500** of every participating government placed at the disposal of the United Nations for the year 2004.

Annex 4

