
Project Working Group on Transport and Border Crossing (PWG-TBC)

12th Session
13-14 March 2007
Dushanbe, Tajikistan

PROPOSED PROJECTS OF COMMON INTEREST TO SPECA COUNTRIES

(Item 4 (b.i) of the Agenda)

(Note by the Research Institute on Transport and Communications (NIITK), Almaty, the institute of technical support on SPECA issues to the Ministry of Transport and Communications of the Republic of Kazakhstan, the lead SPECA country in the field of transport)

Introduction

1. The SPECA Project Working Group on Transport and Border Crossing (PWG-TBC) at its 11th session (29-30 March 2006, Almaty):

(a) Considered the document SPECA/PWG-TBC(11)/2 with the brief description of the proposed projects of common interest to SPECA countries;

(b) Approved in principle the proposed project on Analysis of Euro-Asian transport routes in the TRACECA corridor and requested the Ministry of Transport and Communications of the Republic of Kazakhstan, the lead SPECA country in the field of transport, to submit this project proposal, on behalf of the PWG-TBC, to the Secretariat of TRACECA for consideration of possible funding and joint implementation;

(c) Also approved in principle the proposed project on Transport routes from Central Asia/SPECA countries to Bandar Abbas port and requested the Ministry of Transport and Communications of the Republic of Kazakhstan, the lead SPECA country in the field of transport, to submit the project proposal, on behalf of the PWG-TBC, to the Government of the Islamic Republic of Iran for consideration of possible funding and joint implementation;

(d) Decided to include the information on the status of both projects into the Agenda of the 12th session of PWG-TBC.

2. In accordance with the Guidelines to Improve Efficiency of the SPECA PWG-TBC, adopted by the 10th PWG-TBC session (24 March 2005, Issyk-Kul), the Research Institute on Transport and Communications (NIITK), the institute of technical support to the Ministry of Transport and Communications of the Republic of Kazakhstan on SPECA issues, proposed the additional project of

common interest to SPECA countries – Identification and analysis of transport routes from Central Asia countries to Afghanistan and Karachi port (Pakistan) (Annex 1).

3. This document reviews the status of the three above-mentioned projects.

I. General Provisions

4. The projects proposals on Analysis of Euro-Asian transport routes in the TRACECA corridor and on Transport routes from Central Asia/SPECA countries to Bandar Abbas port were elaborated by NIITK in line with proposals received at the 11th session of PWG-TBC and sent in June 2006 by the Ministry of Transport and Communications of the Republic of Kazakhstan – the lead SPECA country in the field of transport - on behalf of the PWG-TBC to the Secretariat of TRACECA and the Government of the Islamic Republic of Iran respectively for consideration of possible funding and joint implementation.

5. The new project proposal on Identification and analysis of transport routes from Central Asian countries to Afghanistan and Karachi port (Pakistan) was presented by NIITK, at its initiative, to the Ministry of Transport and Communications of the Republic of Kazakhstan for consideration. The Ministry of Transport and Communications of RK sent the project proposal through diplomatic channels to the SPECA countries for consideration in November 2006.

6. If approved by PWG-TBC, the finalized project proposal on Identification and analysis of transport routes from Central Asia countries to Afghanistan and Karachi port (Pakistan) is proposed to be sent to the Government of the United States of America for consideration of possible funding.

II. Issues for consideration

7. At its 12th session, the PWG-TBC may wish to:

(a) Note the information of the Ministry of Transport and Communications of the Republic of Kazakhstan (the lead SPECA country in the field of transport) about the status of possible financing for the project proposals on Analysis of Euro-Asian transport routes in the TRACECA corridor and on Transport routes from Central Asia/SPECA countries to Bandar Abbas port;

(b) Consider the proposed project “Identification and analysis of transport routes from Central Asia countries to Afghanistan and Karachi port (Pakistan)” (Annex 1), and, in case of its approval by the PWG, request the Ministry of Transport and Communications of RK (as the lead SPECA country in the field of transport) to send the project proposal, including all proposed improvements as agreed by the PWG-TBC (if any), through established channels to the Government of the United States of America for consideration of possible funding;

- (c) Review the status on the three above-mentioned projects at the 13th session of PWG-TBC (2008);
- (d) Note the importance of the provision of the Guidelines to Improve Efficiency of the SPECA PWG-TBC (item 2 above) on development of projects of common interest to SPECA countries, for consideration of possible financing by donors; and to stress the importance of active continuation of such activities.

PROJECT PROFILE
**IDENTIFICATION AND ANALYSIS
OF TRANSPORT ROUTES FROM COUNTRIES
OF CENTRAL ASIA TO AFGHANISTAN AND
PORT OF KARACHI (PAKISTAN)**

I. General

With the improvement of the situation in Afghanistan, transport routes from the countries of Central Asia (CA) will have an increasing importance for the realization of its foreign trade potential of the country with the CA countries, as well as with other interested countries in Asia and Europe.

Such transport routes include road (since there is no railways in Afghanistan) as well as intermodal routes, which imply possible use of railways in the neighbouring countries.

The entry into force of the Intergovernmental Agreement on the Asian Highway Network in June 2005 (Figure 1), which was developed under the framework of United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), completed the formalization of road network of international importance in Asia, including Afghanistan (Figure 2) and the CA countries, thus constituting the basis for the identification and analysis of transport routes between the countries of Central Asia and Afghanistan.

Besides, the following activities, such as the accession of Afghanistan to the UN Special Programme for Economies of Central Asia (SPECA) in 2005, and the construction of a road bridge across the river Panj on the border between Afghanistan and Tajikistan with the assistance of USA, etc., reflect Afghanistan's increasing interest to international cooperation, as well as the increasing attention and assistance to the country.

Afghanistan also has an important transit potential in providing the CA countries with the access to sea ports, such as the Port of Karachi in Pakistan.

The Port of Karachi could significantly impact the development of foreign trade potential of the landlocked CA countries and their integration into the world economy.

There are several (road and intermodal railway-cum-road) routes linking the CA countries with the Port of Karachi, including some alternative routes.



Figure 1.

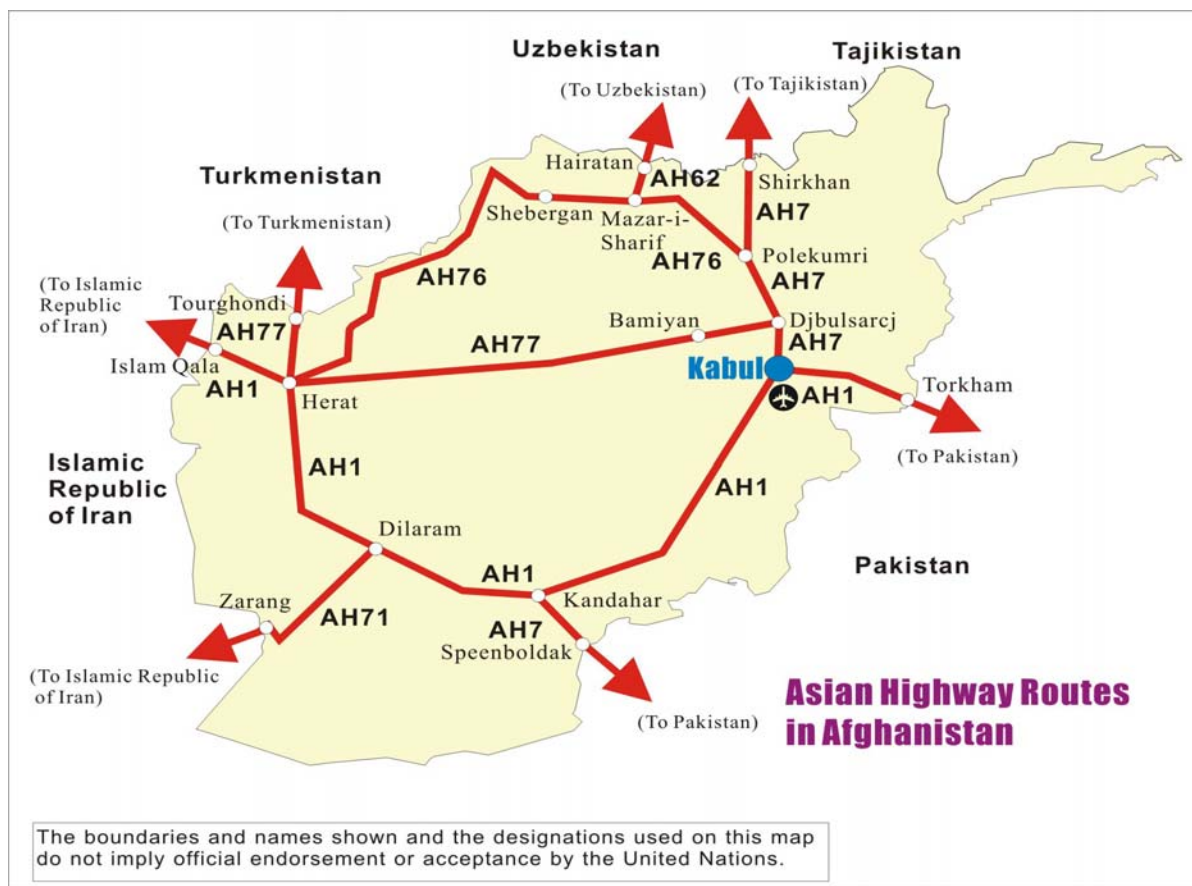


Figure 2.

Representatives of the CA countries at various international fora stressed the importance of the identification of possible transport routes Central Asia – Afghanistan and Central Asia – Karachi and their analysis to determine main technical, commercial and operational indicators of direct interest to shippers, freight forwarders, multimodal transport operators; as well as bottlenecks and measures to remove the bottlenecks.

II. Project objectives

The objectives of the project are to identify/determine:

1. Possible routes (road and intermodal) between the countries of Central Asia and Afghanistan, as well as between the countries of Central Asia and the Port of Karachi (Pakistan);
2. Main technical, commercial and operational indicators of the routes;
3. Physical and non-physical bottlenecks of the routes and the development of an action plan for operationalization and improvement of efficiency of the routes.

III. Project participating countries

The project participating countries include Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan and Pakistan.

IV. Basis of project methodology

1. *Identification of possible routes* connecting CA and Afghanistan, as well as the CA countries and the Port of Karachi, where the major criteria are the existing and potential trade flow patterns. The routes are determined on the basis of proposals received from the project participating countries and finalized with the participation of SPECA countries.

2. *Identification of basic technical, commercial and operational indicators of the routes.*

3. *Identification of bottlenecks (physical and non-physical) of the routes.* Such an analysis is carried out for each route by using the UNESCAP time/cost-distance methodology (Annex A) and taking into account the following package of indicators, which are of direct interest to cargo carriers, freight forwarders and multimodal transport operators:

(a) Technical indicators – existing and needed infrastructure (including border crossing points) and possibility of transport of all types of containers (Annex B) in view of their dimensions (in relation to bridges, tunnels), axle loads, availability of container transshipment equipment, etc.

(b) Commercial indicators:

- Time
- Cost
- The level of necessary services (reliability of schedule, freight security, possibility of tracking of containers/cargo location).

(c) Operational indicators – existing and possible schemes of operation of routes including border crossings, etc.;

V. Duration of the project

14 months from the date of receiving the financing

VI. Project Group

The Research Institute on Transport and Communications (NIITK), Almaty, as the institute of technical support to the SPECA Project Working Group on Transport and Border Crossing (PWG-TBC) would be the lead implementing agency of the project on behalf of the SPECA PWG-TBC.

The project group includes:

1. Director of NIITK – Head of the Group;
2. NIITK staff (2 persons);

3. Project national experts:
 - Afghanistan – highways/road transport (1);
 - Kazakhstan – functions of national experts are carried out by the Project Group of NIITK (Paragraph VI.2 above)
 - Kyrgyzstan – railways and highways/road transport – (2);
 - Tajikistan – railways and highways/road transport (2);
 - Turkmenistan – railways and highways/road transport (2);
 - Uzbekistan – railways and highway/road transport (2);
 - Pakistan – railways and highway/road transport and port of Karachi (3).
4. Project Consultant (1) – Terms of reference of the project consultant are enclosed in Annex C.

VII. Main stages of project implementation

The principal stages of the project implementation are:

- Stage I. *Preparatory stage:* (before getting financing assistance): preparation of brief description of the project, and in case of approval of the project by the SPECA countries– the development of the project document in accordance with the requirements of a potential donors and sending the project documents on behalf of the SPECA PWG-TBC to donors for consideration of possible financing.
- Stage II. *Initial stage of project implementation:* (3 months after getting the financing): formation of the project group; signing agreements with the project national experts and the consultant; development of the project methodology and questionnaires for the project national experts; conducting 3 days meeting (in Almaty) for the developing of coordinated approach for implementation of the project.
- Stage III. *Identification of routes* (3 months): identification of the routes from the CA countries to Afghanistan and the port of Karachi.
- Stage IV. *Analysis of the routes* (3 months): identification of bottlenecks and basic technical, commercial and operational indicators of the routes.
- Stage V. *Developing of the action plan* on operationalization and improvement of efficiency of the routes (3 months): identification of measures to eliminate bottlenecks (physical and non physical barriers) of the routes at national and subregional (SPECA) levels.
- Stage VI. *Meeting of the Project Group to consider results of the project implementation* (3 days, Almaty). Preparation of the draft report on the project implementation (2 months) and its discussion during the above-mentioned Meeting of the Project Group, finalization of the draft report to be considered at the next session of SPECA PWG-TBC.

Stage VII. *Consideration of the draft report* at the next session of SPECA PWG-TBC and finalization of the report, in line with remarks, etc, development and future action plan.

Stage VIII. *Publication of the report*: preparation of the report for publication and the publication of the report.

VIII. Potential donor

United States of America.

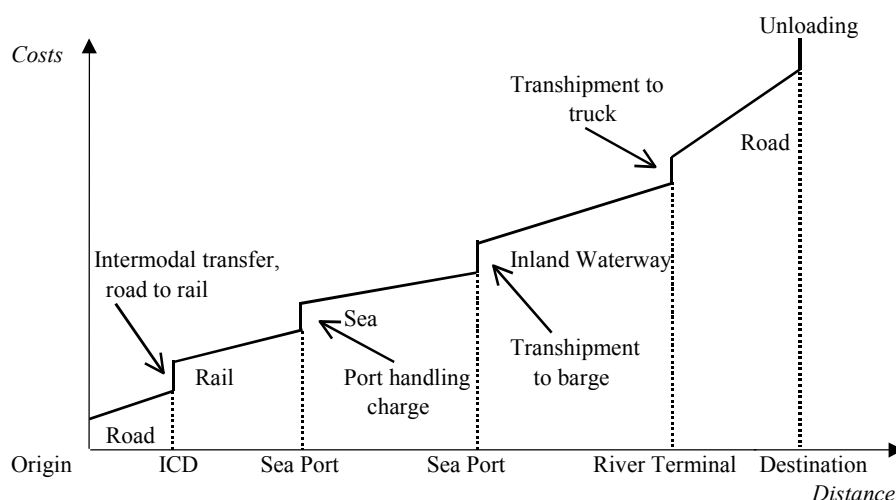
IX. Required financial donor assistance

The implementation of project requires the amount of US\$291,000 (Annex D).

THE UNESCAP TIME/COST – DISTANCE METHODOLOGY

The UNESCAP cost/time methodology is a means of tracking the cost and time taken during transport processes. Data is collected for each segment of a shipment, including loading/unloading, border crossings and points of transshipment between modes (ports, rail freight terminals and inland clearance depots). This data is then plotted against distance. The visual representation allows for a quick comparison between routes and as well as identification of major bottlenecks or problems. Figure 1 shows the process from the point of origin to destination with several modal changes.

Figure 1. Multimodal transport from origin to destination



For every intermodal transfer point and border crossing, there is likely to be a cost (or time) increase. This is represented by a vertical step. The more information you have for each point of transshipment or modal change, the easier it will be to identify problems.

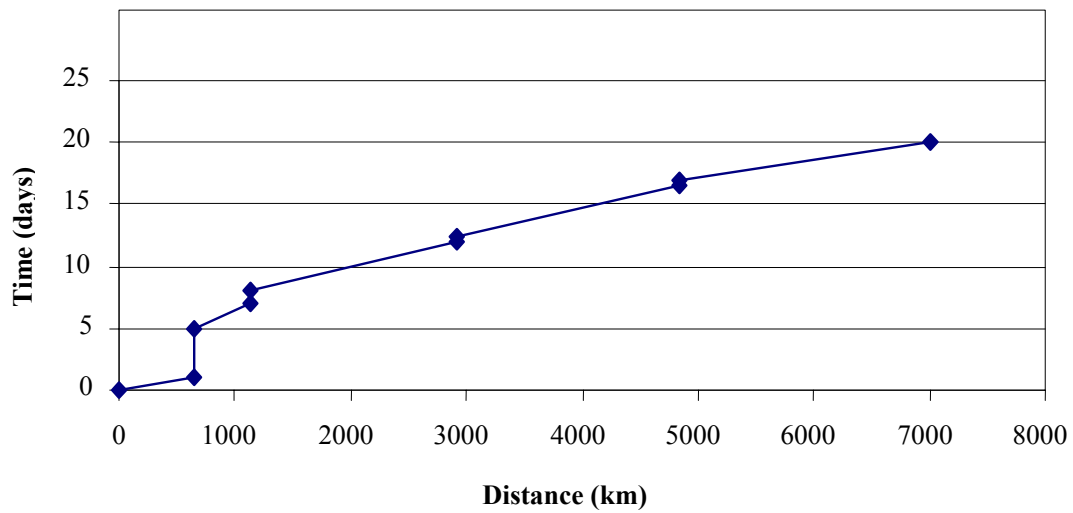
The information needed to build the model includes:

- Full routing from origin to destination, with indication of the places where the cargo is essentially stationary (such as border crossings and points of intermodal transfer);
- Mode of transport for each leg;
- Distance for each leg;
- Transit time for each leg (in hours or days); and
- Cost for each leg.

An example is shown in the table and figure below. The cumulative figures for time (y-axis) are plotted against distance (x-axis). Please note that the data used is fictional.

Uzbekistan – Germany Via Turkey							
Leg	Mode of transport	Distance (km)	Cumulative distance (km)	Average transit time (days)	Cumulative time (days)	Cost (us\$ per TEU)	Cumulative cost (us\$)
Tashkent		0	0	0	0	0	0
Tashkent-Alat / Farab	Highway	650	650	1	1	750	750
Alat / Farab			650	4	5	1000	1750
Alat / Farab-Sarakhs	Highway	480	1130	2	7	500	2250
Sarakhs			1130	1	8	0	2250
Sarakhs - Bazargan	Highway	1780	2910	4	12	1800	4050
Bazargan			2910	0.5	12.5	0	4050
Bazargan - Kapikule (Turkey)	Highway	1940	4850	4	16.5	2000	6050
Kapikule			4850	0.5	17	0	6050
Kapikule - Berlin	Highway	2150	7000	3	20	1000	7050

Tashkent - Berlin (All road)



A quick glance at the above graph would suggest that there is a relatively long wait at the border crossing of Alat/Farab (4 days, according to the table). The reasons for the delay may be further investigated through ground research.

For ease of comparison, it is recommended that a standard container be used as the unit of analysis so that comparisons can be made in terms of TEU or FEU (40-foot equivalent unit).

TYPES AND DIMENSIONS OF CONTAINERS

Freight container designation	External height			External width			External length		
	ft	in	mm	ft	in	mm	ft	in	mm
ISO									
1 A	8	00	2 438	8	00	2 438	40	00	12 192
1 AA	8	06	2 591	8	00	2 438	40	00	12 192
1 B	8	00	2 438	8	00	2 438	30	00	9 125
1 BB	8	06	2 591	8	00	2 438	30	00	9 125
1 C	8	00	2 438	8	00	2 438	20	00	6 058
1 CC	8	06	2 591	8	00	2 438	20	00	6 058
Non-ISO									
High cube containers	9	06	2 896	8	00	2 435	40	00	12 192
Super-high cube containers	9	06	2 896	8	00	2 435	20	00	6 058

Source: ESCAP, 1991: A Study on the Cost Benefit and Problems Following the Introduction of High Cube Containers in Developing Countries of the ESCAP.

TERMS OF REFERENCE OF THE PROJECT CONSULTANT

Terms of reference of the project consultant include:

1. Developing of the project methodology.
2. Analysis of project results on the identification of routes from the CA countries to Afghanistan and the Port of Karachi.
3. Analysis of project results on the identification of bottlenecks (physical and non-physical barriers) of the routes.
4. Analysis of the draft of Action Plan on operationalization and improvement of efficiency of the routes.
5. Participation in the Project Group missions as directed by the Head of the Project Group to selected project participating countries.
6. Taking part in the Project Group meetings and SPECA PWG-TBC sessions at which project results are considered.
7. Carrying out other types of activities as directed by the Head of the Project Group.

The project consultant should meet the following requirements:

1. Higher education
2. Experience (not less than 10 years) in identifying, formulating and analyzing of international transport routes to identify physical and non-physical barriers as well as operationalization of international routes.
3. Fluency in English and Russian languages.

THE PROJECT BUDGET

(US\$)

1	The Project Group of NIITK (3 persons) Project leadership, coordination of project activities, analysis of available materials; use of databases, materials and project related data on Kazakhstan; preparation of documents for consideration, developing of special database; provision of conference room and administrative support to the project group meetings (2)	110,000
2	Consultant/experts: (a). Project consultant (b). Project national experts (12 persons x 2,000 US\$ (paragraph VI.6)	47,000 24,000
3	The project group missions to selected project participating countries and relevant travel by consultant	40,000
4	The project group meetings (2 times in Almaty) and participation in one session of SPECA PWG-TBC (The Project Group of NIITK, project national experts (12) and project consultant)	60,000
5	Publication of the report	5,000
6	Other expenses	5,000
	Total:	291,000