REPORT COVER PAGE

Project Title	Traceca Intermodal Services – TA to the Southern Republics of the CIS-Trade and Transport Sectors	
Project Number	TNREG 9702	
Countries	Ukraine, Georgia, Armenia, Tadzhikistan, Kyrgistan, Azerbaijan, Turkmenistan, Kazakhstan, Uzbekistan	
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Reporting Period Project Progress Report 2
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Annexes

Table of Contents

1 Project Synopsis

Project Title:	Traceca Intermodal Services – TA to the Southern Republics of the CIS-Trade and Transport Sectors
Project Number:	TNREG 9702
Countries:	Ukraine, Georgia, Armenia, Azerbaijan, Turkmenistan, Kazakhstan, Tadzhikistan, Kyrgistan, Uzbekistan
Project Starting Date:	16 June 1998 (effective date of contract)
Project Duration	18 months (from the effective date of contract)

Wider Objectives

Traceca corridor is promoted for intermodal transport

Specific Project Objectives

Intermodal service from the EU to Central Asia is established

Assistance to the intermodal terminals of the ports of Poti, Baku, Turkmenbashi and Aktau, and the inland terminals in Erevan, Bukhara and Almaty is given

Planned Outputs

Module A1, Phase 1

- An updated traffic forecast for rail transport on the Traceca route is available
- Information on target products and their volumes is compiled and evaluated

Module A1, Phase 2

- A legal framework for the pilot extension is drafted
- Standard transport contracts are elaborated
- A marketing plan for the pilot extension is developed
- National and regional multi-modal agencies are established.
- A financial plan is established

Module A2, Phase 1

- A TCLE action plan to implement improved services is formulated and agreed upon

Module A2, Phase 2

- Traceca regional intermodal operating company is established
- Intermodal service is implemented
- Computer / communication equipment is provided
- A Traceca intermodal services information system, suitable for present needs, is existing

Module B1 - Training Interventions

- Training in container and intermodal cargo handling is conducted
- Tailor-made training courses are designed and conducted
- Operational plans for intermodal terminals are prepared

- Qualified staff of intermodal terminals are able to develop their intermodal transport business
- MIS for intermodal terminals recommended
- Marketing plans for intermodal terminals elaborated

Module B2 - Study tours
- Study tours to foster business development are executed

Planned Activities

Module A1, Phase 1 – Analysis
- Establish forecast for rail transport for the Traceca route;
- Appraise competition by contacting western shippers (clients, freight forwarders) in the main European export centres and analyse alternative routes and road transport;
- Determine capacities of Traceca ports, ferry services and intermodal rail terminals;
- Identify administrative bottlenecks on the Traceca route;
- Analyse State common law and transport regulations and identify related legal problems;
- Design a service product for cotton transport;
- Identify target clients, target products and target partners in the EU and internationally.

Module A1 – Phase 2: Design of Services and Operations
- Draft texts for agreements;
- Design customer-related intermodal service products;
- Develop realistic prices for the different products;
- Elaborate transport contracts and get them accepted in all Traceca states;
- Forecast an operations budget;
- Establish end to end costs for the intermodal service.

Module A2, Phase 1
- Audit all TCLE documents and analyse existing TCLE traffic;
- Elaborate business, marketing and financial plans;
- Formulate an action plan.

Module A2, Phase 2: Operations of the TCLE
- Implement intermodal services along the entire Traceca route;
- Design actual system, subcontracting and testing;
- Print an information system handbook.

Module B1: Training
- Develop and conduct training in modern Management Information Systems
- Conduct training courses in intermodal operations and container handling techniques and practices
- Design training for the varying potential future activities
- Conduct training in marketing
- Conduct training in design and placement of publicity material
- Conduct training measures to support the implementation of intermodal pilot extensions

Module B2: Study Tours
- Execute study tours to western Europe

2 Summary of Project Progress since the Start

2.1 General Project Activities

Since the start of the project first of all negotiations with the different Railways and other transport operators took place. These negotiations concerned price as well as conditions of rendering transport services. These negotiations proved to be more time-consuming than initially anticipated.

Several contracts with terminals as well as with the Railways have been concluded.

A major success of the project has been that due to the project activities the freight rate level in the Caucasus has decreased considerably. This should have some positive impact on the national economies of the region.

The intermodal service has been promoted to clients in Europe by advertising letters (direct mailings to potential clients) as well as to international clients on the "Oil and Gas Exhibition" in Baku.

Several training events have taken place to train relevant people from the Caucasian states in intermodal, marketing and container handling matters.

2.2 Installation of the container handling equipment provided by the European Union

Most of the container terminals relevant for the intermodal service are now sufficiently equipped to perform container handling due to the equipment provided by the EU within the Tacis-Traceca projects.

Uzbekistan
All the equipment has been delivered at the BUKHARA centre.

The equipment for handling containers consists of :
- 1 KALMAR reachstacker 41 T
- 1 forklift 42 T
- 4 under-frame containers

The equipment for handling cotton balls consists of :
- 24 Hyster forklift trucks

Traffic areas have been prepared by the site owners.

The equipment sent by the European Union was officially transferred to Uzneshtrans (the forwarding agent) in April 99. Uzneshtrans is in charge of operating this equipment. Uzmarkazimpex, the cotton central selling office, has visited the Bukhara centre to verify the quality of the installations

.

Turkmenistan
The port of Turkmenbashi has also received some container handling equipment
- Two 47 t forklifts are operational
- Tug masters and chassis
- An area for unloading and stocking containers has been prepared.

The infrastructure implemented to develop container traffic in Uzbekistan and Turkmenistan is now operational.

3 Summary of Project Planning for the Remainder of the Project

3.1 Implementation of Intermodal Services

As described in more detail in point 4 "project progress", the overall situation in the project countries changed in the last months. The container turnover especially in the port of Poti has declined by almost 80% with the effect, that the competition between the trucking companies has caused a decrease of the prices between Poti, Armenia and Azerbaijan for road transportation. Due to this fact, the calculated rates for the Intermodal Services Transportation will be re-evaluated. A high degree of attention will be paid to emphasise and develop the quality and reliability of the services offered in order to attract more clients.

In addition to that, the negotiations with Central Asian Railway and Terminal companies are in progress and will be finalised in the nearest future. Also, the negotiations with the Caspian Shipping Company will have to be concluded.

3.2 Training

During the remainder of the project period the practical container handling and terminal organisation training will be continued in inland container handling terminals in Central Asia as well as in the Port of Turkmenbashi. Furthermore, a second local seminar on marketing and business development with a lecturer from West Europe will be carried out for participants of Central Asia.

Study tours will be conducted from September this year. The first tour will be executed for high ranking participants from the Ministries of Transport of the partner states involved in the present project. After that, it is planned to conduct two more study tours. One is planned for participants from the states of Azerbaijan, Armenia and Georgia, and the other one for participants from Kazakhstan, Turkmenistan and Uzbekistan. The participants shall be selected from the respective railways, customs and container handling terminals, maritime as well as inland terminals. For future training activities please see table "Training" in the table section of this report.

3.3 Promotion

The active marketing of the Intermodal Services is ongoing in West Europe. Potential clients have been met and information letters sent. Further, it is planned to advertise the new intermodal service in major transport journals.

In the future, major emphasis will be laid on marketing and cargo canvassing activities in the Caucasus, especially in the entrance point of the Caucasus, in the Port of Poti.

The web side, advertising and explaining the service in the internet, is currently under elaboration.

4 Project Progress in the Reporting Period

4.1 Status of the implementation of the Intermodal Services

4.1.1 Caucasus (Armenia, Azerbaijan, Georgia)

The main task envisaged for the last two months of the reporting period was the commencement of actual operations of the Intermodal Service, i.e. the transporting of containers by rail across the Caucasus. As already mentioned in the Progress Report No. 1, several test journeys with container shipments have been made between Poti and various destinations in Azerbaijan and Georgia. They proved that the service was operationally viable. the market research and the contract conclusions indicated that the service was commercially viable, too. But, in the last two or three months our efforts received a major setback, as explained hereunder. The explained developments necessitate a revision of previous work and re-focussing of future activities. The project schedule has been thrown back by several weeks.

The number of containers arriving in Poti in the first three months of 1999 was nearly 70 % lower than the containers handled in the Port of Poti in the same period in 1998. In total, approximately 4000 TEU were handled in 1999 instead of almost 14.000 TEU in 1998.

This drastic decline of container traffic via the Port of Poti has a double negative effect on the implementation of the Intermodal Services project

- The total number of containers available for railway transport is much lower
- The price level is lower than estimated before due to higher competition for the available containers.

The trucking industry is very strongly competing between each other to fill the capacity available. This leads to the effect, that the price level for the transportation to Baku and to Erewan is decreasing. Offers for 20' containers to Erewan are on a level of US$ 600,-- and the price level to Baku is almost on a level of US$ 1300 to US$ 1400 for a 20' container.

The drastic decline of container turnover in Poti is mainly based on the following reasons:

- The economical development of Azerbaijan and the decrease of imports into this country. Azerbaijan was at all times the motor of the development of the transport volumes via the TRACECA route and without this potential the increase of container traffics are not realistic.

- The competition of the southern route via Bandar Abbas in Iran.
  Meanwhile Bandar Abbas is the leading Port for goods coming from the US –West coast and the Far East. Goods which are coming from the United States of America are shipped in containers to Dubai, discharged in Dubai and loaded on trucks which are carried by ferry services to Bandar Abbas. From Bandar Abbas the trucks are going to Armenia, Azerbaijan and via Turkmenistan to Central Asia. The freight rate level is lower than the transport via the Caucasus.

- The competition of the northern routes via Russia
  The Russian Black Sea Ports together with the Russian Railways are offering very favourable rates from the Black Sea or even from West Europe to Azerbaijan and Central Asia. Especially

the port of Novorossiysk in Russia is going to be the main gateway to Kazakhstan and Uzbekistan.

- The Port of Poti
  The costs in the port of Poti are also one of the reasons, that customers are trying to find other transport links for their Container traffic to Azerbaijan and Central Asia. The extraordinarily high rates for the storage of empty and full containers in the port area of Poti led to the establishment of various inland terminals in the vicinity of the port area. The transport costs from the port to this inland terminals and the way back to the port is less expensive than the storage costs in the port In comparison to other ports, the total container costs are much higher. This is one of the reasons, that the port of Poti had lost its importance as container transit port for Azerbaijan and partly for Armenia.

In addition to that, the direct trucks via Turkey and the trucks via Bulgaria and the ferry link to Poti still transport goods as conventional or ro-ro cargo in competition to the container transport.

4.1.2 Central Asia (Turkmenistan, Uzbekistan, Kazakhstan, Tadschikistan, Kirgistan and Mongolia)

So far, test transports (trials) have not been executed via Baku into the Central Asian Republics. There are many reasons for this situation and many problems which are so far not solved:

- Contracts
  As explained in the Progress Report no. 1 the intermodal service is designed as a product from a place of loading (e.g. Port of Poti) to a place of destination (e.g. Baku- warehouse of an importer) with a defined transit time and a fixed price for a full service package. The product for Central Asia is being designed in the same way. This means, the Intermodal Operator has to negotiate and sign contracts with several parties involved in the transport chain e.g.

  Caspian Shipping Company

  A contract is not concluded. A price of US$ 24 per meter of a rail car was discussed for full containers and 50 % of this amount for empties. This means US$ 360 for a full 40' container because this container needs a rail car of 15 m length. Information received via Uzbekistan indicate a lower price for cotton shipped in conventional rail cars (US$ 22 per meter). As an alternative to this, we have also discussed a service from Baku to Akita in Kazakhstan using conventional ships for containers. Both subjects are to be re-discussed with the intention to sign a contract. Until now, we have to calculate with the official rate of US$ 30,-- per meter or US$ 450 per 40' container full and US$ 225,- for an empty 40' container.

  Turkmenistan Railway

  Turkmenistan has signed the Sarakh - Agreement in which the member states of this agreement are granting each other for bilateral transports a discount of 50% based on the MTT-Tariff. For the time being, the Government of Turkmenistan is not willing to give this discounts for transit cargo. During visits in Ashgabat the Consultants learned, that the present position is based on the unsettled problems with the neighbour countries in regard of transit transports in pipelines. As long as these problems are not solved, the Sarakh dis-

counts are not available. Nevertheless, negotiations with the Railways are being continued. Until formal contracts have been signed, the official tariffs have to be calculated. Terminal Contracts are under negotiation as well.

Uzbekistan Railways

A basic contract has been signed with the Uzjeldorexpetia in Tashkent, a daughter company of the Uzbekistan Railway. Transit tariffs through Uzbekistan are still open and the Terminal Contracts not signed so far. The contract proposals are agreed verbally and the points to clarify are basically internals like foreign currency transfers etc.

Kazakhstan Railways

The contracts are under negotiations.

Kirgistan, Tadschikistan and Mongolia

For these countries contracts with Kazakhstan and / or Uzbekistan railways.are going to be signed.

- Container

One of the Problems of the Intermodal Service is the equipment. Either empty containers have to be brought into one of the Central Asian Countries for export from these countries or empty containers have to be brought back to central Europe. In various discussions with potential customers especially in Uzbekistan the equipment question for export cargoes in larger quantities (cotton) could not be settled so far. Negotiations are ongoing with larger import companies about the utilisation of their containers and the empty positioning. If the cotton could be transported in containers in an amount of 20 % almost 6.500 40' containers are required.

Cotton transport in container

Transport costs based on normal tariffs (without tremendous discounts) through Turkmenistan and via the Caspian Sea show, that containerised transportation to Southern and Western Europe is much more expensive than conventional loads on rail cars (via Novorossijik, Poti or Latvian Ports). The different today amounts to about USD 30 per ton FOB Poti. For Central or South Europe the customers will require CIF-rates. This forces the needs for integrated sea-freight rates.

The liner services from and to Poti refuse to quote container rates for cotton (except for containers which are stuffed in the port). They are utilising their own equipment by balancing the different amount of full export and empty import containers by using cotton as backload cargo (stuffed at factory site). In this case even a lower price level for containers will not be able to change the decision of shipping lines to keep the business in their own hands.

For being successful on the Traceca corridor with Uzbekistan cotton in containers it is necessary to cover the whole transport chain only under consideration of container imbalances.:

- Either as subcontractor for the established shipping lines
- Or as main contractor with new shipping lines
- Or by establishing a stuffing centre in the port of Poti (changing conventional into containerised transport modes by using carriers empty depots)

- Other Cargoes identified for the TRACECA Corridor

Especially in Uzbekistan but also in Kazakhstan in various meetings with customers which are importing goods, the TRACECA Corridor has been discussed. For Uzbekistan it might be possible to generate between 200 and 300 TEU's as regular transport volume per month. This can be increased if back loads like cotton can be attracted. Also, potentially export cargoes others than cotton which can be containerised are available.

The import of containerised cargoes into Kazakhstan are not going via the TRACECA corridor. The freight rates on the northern routes are much cheaper.

The situation concerning Kirgistan and Tadzhikistan and also the import of containerised cargo into Turkmenistan are not evaluated for the time being.

4.1.3 The evolution of cotton shipments departing from Uzbekistan

Since the last report, the following events have taken place:

- The equipment provided by the European Union has been officially transferred to Uzneshtrans which is in charge of operating these machines.
- Mr SULTANOV's cabinet addressed a copy of the letter we sent them on April 20, 1999 to Uzneshtrans and Uzmarkazimpex. In this copy, the prime minister's cabinet notified their agreement to the letter's content
- The ministers' cabinet ordered MFER to give 10,000 tons of cotton to the Bukhara Centre to be shipped by container.
- An agreement has been reached with a container company so that this company will supply containers to Bukhara in the future.
- Uzmarkazimpex made an agreement in principle with a cotton trading company in order to modify sales terms. Buying contracts will now be signed **FOR depot Boukhara or FOR Ginnery**.
- Negotiations between the Uzbek railway tariff department and Uzjildorexpetitsia are underway.
- The Turkmen railway and Caspian Shipping line are in the process of negotiating.
- The Trader has made an agreement in principle to send 30 containers in June. This shipping will be run as a test and on condition that the proposed tariff terms are competitive.
- Larger shipments will definitely not be underway before September / October 1999. Most of the cotton available from the 1998 campaign has already been sent to the following ports of departure: Riga, Poti and Bandar Abbas.

4.2 Conditions in the Local Markets

4.2.1 Objectives :

The development of the INTERMODAL SERVICE project has to be based on a sound evaluation of the local markets; therefore, we conducted an in-depth market analysis in order to better appraise the image of transport and logistics in the mind of Traceca states businessmen.

The first objective of this analysis is therefore to better adapt the INTERMODAL SERVICE offer in future to the expectancies of the potential customers.

The second objective is to provide a consistent set of observations and conclusions that will be used to taylor the promotion and advertising campaign.

Third, we bear in mind that training courses must be closely adapted to the needs of the future local operators of the INTERMODAL SERVICE (Railways' marketing staff, traffic managers, terminal operators etc.). We have repeatedly observed that in the CIS professional transport operators tend to force their organisation and thinking on the customer instead of taking into account the needs of the customers. This approach has to change in future.

The analysis provides an overview of the customers' thinking and will make the operators realise :

- that there is still a gap between what the customers want and what they, the transport operators are ready to offer, or else,
- that some outdated reactions are still alive in the customers' minds and that they will have to take the time and explain to them what the situation is really like as compared to the current thinking (such as the "dangers" of crossing the Caucasus).

4.2.2 methodology :

Experts interviewed and gathered information on importers, exporters, freight forwarders, insurers, etc. 50 local businesses that might be interested in container operations have been approached and in the end we were able to collect viable information from 174 companies covering all Traceca states (except of Tajikistan and Turkmenistan, as this latter country has a comparatively small import/export traffic).

4.2.3 overview of the results :

The analysis has drawn some general comments and conclusions; it points out :

- a lack of proper transport "culture"
- a lack of reliable figures
- a distorted image of transport modes and operations in the customers' minds
- several comments on transport related issues such as customs formalities or insurance matters
- a better understanding of the image of the Traceca Line

The most important pieces of information have been extracted from more than 450 pages of interviews in order to produce the tables and comments shown in Annex 5 - 2.

4.3 Detailed analyses of the former TCLE service

Further to the general recommendation about the former TCLE service made in the Progress Report I a detailed analyses of the TCLE transports are attached in Annex 1.

4.4 Foundation of a legal entity

To be in the position to work on the TRACECA – Route as an Intermodal Service Operator after the initial or project period, a legal entity has to be founded in one of the TRACECA Countries which have signed the Sarakh agreement. Furthermore, branch offices or even other legal entities have to be founded in the involved countries. The necessary steps for the main enterprise which is planned to be located in Georgia are described and attached in Annex 2.

4.5 Set up of a training programme

In order to ensure sustainability of the results a training programme on the provision of profitable and efficient intermodal container handling services of high quality consistent with the clients requirements has been designed and conducted.

The Consultants have already carried out a container operations and terminal organisation training in the Port of Baku. (Report see Annex 3 - 1). Further training in container handling and terminal organisation has been conducted in the port of Poti (Report see Annex 3 - 2). This practical training will be continued after the summer holidays on all relevant terminal locations, that is in the port of Turkmenbashi as well as on the inland container and intermodal terminals in Central Asia. For the practical training, operating staff from the different terminals have been chosen. The operating personnel from the ports and inland terminals will also be the target group of the future practical container handling and terminal organisation training measures, in order to ensure smooth intermodal operations and to prevent bottlenecks on the terminals.

After analysing the current situation on location it was further decided to conduct marketing and business development training. The first training in this subject was carried out for participants from the Caucasus in the beginning of June (Report see Annex 3 - 3). A similar training is planned to be conducted in Central Asia after the summer holidays, presumably in September. For the training, participants from all parties involved in the intermodal transport chain have been selected, that is from ports, customs and railways. This holistic approach was chosen in order to further the co-operation between the different transport partners and thus to ensure smooth transportation during the whole transport chain. The discussions during the seminar showed that the participants very much appreciated this selection of participants. In their daily work they have little opportunity to communicate with the other institutions related to transport. Therefore, this seminar in some cases provided the first opportunity to get an understanding of the point of view of another party. Especially the participants from Azerbaijan and Armenia who usually have little opportunity to get into contact with each other, took the chance to discuss problems and find a common language. During the seminar special emphasis was laid on the image of transport in the Caucasus and the necessity to co-operate with each other in order to avoid bottlenecks and problems for the clients. For the same reasons for the training in Central Asia also participants from the different institutions will be chosen.

In the beginning of the year already some training in marketing was conducted for participants from the marketing and commercial department of the port of Poti. A short report is given in Annex 3 - 4.

4.6 Introduction of an information system

4.6.1 Requirements of modern communication systems

The modern transportation industry needs modern communication tools. Therefore, a description of container information systems applied in West Europe and the link between these systems is described in Annex 4– 1.

4.6.2 A feasible solution for the Intermodal Services

A software for an easy to handle information system has been developed. Annex 4 - 2.describes this software which is based an the Microsoft Product Access and which can run on the hardware to be purchased within this project. The purchase of this hardware is currently in the tender process.

4.7 Promotion of the new Intermodal Services

During the last two months the new Intermodal Service was promoted in Western Europe, in order to attract cargoes for the new service and to build a new image for the Caucasus and Central Asia in terms of safety and ability to perform efficient and reliable services in international trade. Altogether, this will lead to first concrete intermodal transport operations under the Traceca flag and generate revenues in hard currencies for the different transport partners in the beneficiary states.
Price lists and service announcements had been developed and a few hundred direct mails, telephone conversations and personal discussions have been executed. The main companies which were contacted are listed in Annex 5 – 1 as well as the published letters and price lists.

From the 1st until the 4th of June 1999 the project was presented at the "Caspian Oil and Gas Exhibition" in Baku with an own Intermodal Project stand. Experts from the local Intermodal Organisations in Georgia and Azerbaijan and experts from Western Europe presented the Intermodal Service Idea and distributed information brochures. A list of visitor is included in Annex 5 – 1.

Currently, a web site in the internet is being elaborated for promotion purposes. Advertisements in some major West European transport related newspapers will be published.

The Consultants have also visited potential customers as well as transport related institutions in Central Asia to promote the new intermodal services.

A marketing survey has been conducted. The results of this survey are attached in Annex 5 - 2.

4.8 Transport Capacity

In principal, the Railways of the states involved in the Intermodal Service Project experienced a sharp decline of traffic and goods after the break down of the Soviet Union (in some areas almost 80%). Even considering that the overall condition of the involved railways is not as good as it was in Soviet times, there is still enough capacity to carry the containers on the TRACECA Corridor by railways. The situation of the ferry services in the Caspian Sea might be different. The decrease of cargo volumes led to the effect that part of the fleet is now serving in other parts of the world, so that not enough capacity might be in service on the Caspian Sea to establish a regular liner service between Baku and Turkmenbashi or Aktau at once. This is one of the items to be discussed with the Caspian Shipping Company.

The situation of the new established rail ferry link between Ukraine and Georgia is presently not clear. As the service started only a few weeks ago, realistic figures are not available.

The presently available terminal facilities in Central Asia as well as in the Caucasus do not pose a problem for the cargo volumes expected in the immediate future (see Annex 6 – 1). The capacity of the Buchara Cotton Terminal, which was financed by the European Union is separately described in Annex 6 – 2.

4.9 Agreements

In Annex 7 an overview and up-date of the various agreements (Intra Traceca Zone Agreements, Central Asian Railways Agreements, International Agreements for European Union / CIS / Central Asia and on Transport Routes) is given. Also, the rail routes and the distances from Europe to Almaty, Ashgabat and Tashkent are described.

5 Planning for the whole duration of the project

5.1 General

The implementation of an Intermodal Service in general is possible, if the services provided generate profits. In the Progress Report 1 it was stated, that a step by step approach has to bring practical results with the target to implement in the Caucasus a full running service before starting with the implementation in Central Asia. As already explained, the situation has changed and in fact only with renegotiations of some of the contracts so far signed, the product price of the Intermodal Services can be adjusted to be competitive in the actual market. In parallel to this, the activities in Central Asia are being carried out.

The training courses have been started successfully in the Caucasus with participants from Armenia, Azerbaijan and Georgia. After the summer season similar seminars will be held in Central Asia. Further the Study tours will start.

According to our original personnel deployment schedule, the on-site period of the Senior Business Development Expert / Team Leader has elapsed. In view of the difficulties we face with implementation of the services, we decided to extend the on-site presence of our senior expert. Therefore, in July the Team Leader Mr. Rössig will hand over his responsibilities to Mr. Gerhard Persdorf. Additionally to continuing contract negotiations, Mr. Persdorf will focus his attentions very strongly on marketing the services, canvassing cargo and establishing personal contacts with major potential clients.

5.2 Further Planning

In mid of July 1999 the contract renegotiations in the Caucasus will start and parallel the negotiations with Turkmenistan Railways will be continued. Also in July the open contracts in Uzbekistan will be concluded and in August the negotiations with the Kazakhstan Railways and the Terminal operators in Kazakhstan will be continued. Recent changes in Kazakhstan will cause some delays because Centre for Freight Services in Astana is being dismantled and the future contracts are to be signed with an other body of the Railways.
The contacts with big customers are to be intensified and especially the contacts with the cotton traders will be used to investigate possibilities for the transportation of cotton in containers out of Uzbekistan. The latest visits of the consultant in Central Asia have shown, that solutions can be found with the Turkmenistan Railways and the Intermodal Project and with the Kazakhstan Railways in regard of container transportation via Aktau to and from Uzbekistan.

The Information Market which was planned already for April should be held after the summer holidays in the TRACECA countries and should be used, to explain the parties involved, the necessity of supporting the Intermodal Service Project Idea. In this Information Market it will be clearly stated, that a Intermodal Product and the price of this product can only be as good as the services and prices the Intermodal Operator receives from the railways and other contract partners.

Form 2.3: RESOURCE UTILISATION REPORT

Project Title: **Traceca Intermodal Services**	Project Number: **TNREG 9702**	Country : Ukraine, Georgia, Armenia, Azerbaijan, Turkmenistan, Kazakhstan, Tadzhikistan, Kyrgistan, Uzbekistan	Page: 2.3 / 1
Period: **January1999 - December1999**	Prepared on : **31 May 1999**	EC Consultant : :**Polzug - Axis - HPTI Consortium**	
Project Objectives:			

RESOURCES/INPUTS	TOTAL PLANNED		LAST PERIOD PLANNED		LAST PERIOD REALISED		TOTAL REALISED		AVAILABLE FOR REMAINDER	
PERSONNEL	CIS	EU	CIS	EU	CIS	EU	CIS	EU	CIS	EU
Business Development Expert 1	65 days	42 days	25 days	2 days	25 days	2 days	45 days	4 days	20 days	38 days
Business Development Expert 2	100 days	15 days	105 days	11 days	105 days	11 days	196 days	16 days	-96 days	-1 days
Rail Operations Expert	59 days	8 days	8 days	5 days	8 days	5 days	18 days	6 days	41 days	2 days
Railway Expert	46 days	10 days	43 days	10 days	43 days	10 days	43 days	10 days	3 days	0 days
Freight Forwarding Expert	25 days	17 days	0 days	2 days	0 days	2 days	0 days	9 days	25 days	8 days
Intermodal Operations Expert.	22 days	2 days	0 days	0 days	0 days	0 days	0 days	0 days	22 days	2 days
Marketing Expert	84 days	10 days	10 days	0 days	34 days	21 days	109 days	69 days	-25 days	- 59 days
Railway Marketing + Finance Ex	20 days	4 days	10 days	2 days	0 days	0 days	0 days	0 days	20 days	4 days
Tariffs Expert	24 days	2 days	16 days	0 days	0 days	0 days	0 days	0 days	24 days	2 days
Legal Expert	69 days	10 days	30days	10 days	0 days	13 days	0 days	13 days	69 days	-3 days
Market Analyst	30 days	12 days	10 days	0 days	15 days	5 days	52 days	32 days	- 22 days	- 20 days
Exp. MIS + Cost Accounting	45 days	5 days	20 days	2 days	0 days	0 days	0 days	0 days	45 days	5 days
Financial Expert	25 days	9 days	10 days	5 days	0 days	0 days	0 days	0 days	25 days	9 days
Project Database Expert	20 days	0 days	10 days	0 days	0 days	0 days	0 days	0 days	20 days	0 days
Transport Economist	24 days	0 days	0 days	0 days	0 days	0 days	20 days	0 days	4 days	0 days
Project Co-ordinator	150 days	28 days	30 days	15 days	4 days	16 days	19 days	19 days	131 days	9 days
Project Director + Backstopper	44 days	21 days	11 days	10 days	11 days	10 days	22 days	27 days	22 days	-6 days
Project Co-director	130 days	76 days	33 days	30 days	33 days	36 days	84 days	69 days	46 days	7 days
Lecturer / Training	202 day	90 days	60 days	30 days	50 days	0 days	50 days	0 days	152 days	90 days
Sub-total	**1148 days**	**351 days**	**431 days**	**134 days**	**328 days**	**131 days**	**650 days**	**259 days**	**534 days**	**102 days**
Local Experts	1500 days		520 days		519 days		1284 days		216 days	
Sub total	**1500 days**		**520 days**		**519 days**		**1284 days**		**216 days**	
Interpreter	815 days		340 days		347 days		413 days		402 days	
Interpreter (Conference)	60				0		0		60 days	
Sub-total	**875 days**		**66 days**		**66 days**		**413 days**		**462 days**	
TOTAL	**3559 days**		**1017 days**		**1194 days**		**2347 days**		**1212 days**	

FORM 2.4 : OUTPUT PERFORMANCE PLAN

Project title : **Traceca Intermodal Services**	Project number : **TNREG 9702**	Country : Ukraine, Georgia, Armenia, Azerbaijan, Turkmenistan, Kazakhstan, Tadzhikistan, Kyrgistan, Uzbekistan	Page :
Planning period : **January1999 - December1999**	Prepared on : **31 May 1999**	EC Consultant :**Polzug - Axis - HPTI Consortium**	

Outputs (to be described and target dates indicated	Deviation Original Plan + or - %	Reason Deviation	Constrains, Remarks and Assumptions C/A
Module A1, Phase 1			
• An updated traffic forecast for rail transport on the Traceca route is available	0		• Studies concerning the Traceca region are available
• Information on target products and their volumes is compiled and evaluated	0	Information Flow from local institutions is slower than assumed	• The relevant administrations and institutions co-operate and provide information
Module A1, Phase 2			
• A legal framework for the pilot extension is drafted	0		
• Standard transport contracts are elaborated			• Terminals and railways agree to make realistic co-operation proposals
• A marketing plan for the pilot extension is developed	0 -50		
• National and regional multi-modal agencies are established.	-80	Contacts to Agencies are established	
• A financial plan is established	-20	Prices are calculated and partly agreed	• Railways agree to accept competitive prices
Module A2, Phase 1			
• A TCLE action plan to implement improved services is formulated and agreed upon	- 20	It was decided not to continue the TCLE but instead to establish a new intermodal product, due to conceptual faults of the old TCLE.	

Project title : **Traceca Intermodal Services**	Project number : **TNREG 9702**	Country : Ukraine, Georgia, Armenia, Azerbaijan, Turkmenistan, Kazakhstan, Tadzhikistan, Kyrgistan, Uzbekistan	Page :
Planning period : **January to December 1999**	Prepared on :**31 May 1999**	EC Consultant :**Polzug - Axis - HPTI onsortium**	

Outputs (to be described and target dates indicated	Deviation	Reasons for Deviation	Constrains, Remarks and Assumptions C/A
Module A2, Phase 2			
• Traceca regional intermodal operating company is established	0	Under elaboration (see Report 1)	• Local partners agree to participate
• Intermodal service is implemented			• Under the condition that Cargo can be attracted
• Computer / communication equipment is provided	-50	Offers are being evaluated	
• A Traceca intermodal services information system, suitable for present needs, is existing	-30	Under elaboration	
Module B1 - Training Interventions			
• Training in container and intermodal cargo handling is conducted	0	Courses have started	• Suitable trainees are made available and exempted from daily work for the training periods on location and in Europe
• Tailor-made training courses are designed and conducted	0	Courses have started	
Module B2 – Study Tours			
• Study tours to foster business development are executed	-100	Postponed till second half of 1999	

Form 1.6. PLAN OF OPERATIONS FOR THE NEXT PERIOD (Work programme)

Project title : **Traceca** Intermodal Services	Project number : **TNLREG 9702**	Country : Ukraine, Georgia, Armenia, Azerbaijan, Turkmenistan, Kazakhstan, Tadzhikistan, Kyrgistan, Uzbekistan	Page :
Planning period : **July 1999 - December 1999**	Prepared on : 31 May 1999	EC Consultant : **Polzug – Axis – HPTI Consortium.**	
Project objectives :			

		TIME FRAME												INPUTS	
		1999 (months)													OTHER
No	ACTIVITIES							Jul	Aug	Sep	Oct	Nov	Dec	EC Consultant	Flights
A1, 2 1	Draft texts for agreements														
2	Design customer-related intermodal service products													4 weeks	
3	Develop realistic prices for the different products								xxxx					6 weeks	
4	Elaborate transport contracts														
5	Forecast an operations budget									xxxx				4 weeks	
6	Establish end to end costs for the intermodal service														
A2, 1 1	Elaborate business, marketing and financial plans										xxxx	xxxx		3 weeks	
2	Conduct Information Market										xx				
A2, 2 1	Implement intermodal services along the entire Traceca route							xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	64 weeks	
2	Design actual system, subcontracting and testing													8 weeks	
3	Print an information system handbook											xxxx			
B1, 1 1	Develop and conduct training in modern Management Information Systems							xxxx	xxxx	xxxx					
2	Design training for the varying potential future activities									xx	xxxx	xxxx			
3	Conduct training in marketing							xxxx	xxxx	xx					

No	ACTIVITIES							Jul	Aug	Sep	Oct	Nov	Dec		EC Consultant	
4	Conduct training in design and placement of publicity material							xxxx	xxxx	xxxx	xxxx					
5	Conduct training measures to support the implementation of intermodal pilot extensions									xx	xxxx	xxxx	xx		22 weeks	
B2	Execute study tours to western Europe									xxxx	xxxx	xxxx			17 weeks	
																48 Flights
													TOTAL		128 weeks	

Training Measures

Timeframe	Topic	Participants	Location
February 1999	Marketing	Marketing and Commercial Department of the Port of Poti	Poti, Georgia
February/March 1999	Practical Training in Container Handling and Terminal Organisation	Operations personnel of the Port of Baku	Baku, Azerbaijan
June 1999	Marketing and Business Development	Terminal, Railways and Customs personnel from all Caucasus states and from Caspian Shipping	Gudauri, Georgia
June 1999	Practical Training in Container Handling and Terminal Organisation	Operations personnel of the Port of Poti	Poti, Georgia
planned			
September 1999	Marketing and Business Development	Terminal, Railways and Customs personnel from Kazakhstan, Uzbekistan, Turkmenistan	Almaty, Kazakhstan
September - November 1999	Practical Training in Container Handling and Terminal Organisation	Operations personnel of the Ports of Aktau and Turkmenbashi and Central Asian inland terminals	Turkmenbashi Aktau Almaty Bukhara Tashkent Yerevan
September - November 1999	Study Tour 1 to West Europe	3. Participants of the Ministries of Transport from the Traceca states	Germany, France
	Study Tour 2 to West Europe	1. Railway, Ports and Customs personnel from the Caucasus	Germany, France
	Study Tour 3 to West Europe	2. Railways, Ports, Terminal and Customs personnel from Kazakhstan, Turkmenistan and Uzbekistan	Germany, France

Annex 1

Analysis of the Trans-Caucasus-Logistics-Express (TCLE)

Analysis of the Trans-Caucasian-Logistic-Express (TCLE)

In the Progress report no.1 a general description of the TCLE was included. Meanwhile, the details have been evaluated.

In 1996 the TRACECA Programme started the Project for Trans-Caucasian-Logistic-Express (TCLE). The project had included the two state-owned forwarding Companies - "Azerjeldorexpedition" (Azeri RW Expedition) and "Gruzjeldorexpediiton" (Georgian RW expedition). On the basis of the Protocol of joint meeting of the Azerbaijan State RW and the Georgian State RW with the Project Team "Caucasus RW" from 14.08.1996, it was decided to start with the first train on 14-17 October, 1996.

Since end of December 1997 the Trans-Caucasian-Logistic-Express (TCLE), has stopped services and the train does not longer work.
The tables below show the amount of containers, transported by the Logistic Express from January to December 1997.

Container transportation from Poti by Logistic-Express. January.1997.

N of Rolling stock	Departure	Container			Amount of wagons	DIRECTION					
						Azeri			*Central Asia*		
		20'	40'	Total		Wagon	20'	40'	wagon	20'	40'
1.2001	09/01,20:00	6(3)	9/0	15(3)	9/0	9/0	6(3)	9/0	-	-	-
2.2001	19/01,20:00	2(9)	11/0	13(9)	11/0	11/0	2(9)	11/0	-	-	-
3.2001	23/01,20:00	0/3	12/0	12(3)	12/0	-	-	-	12/0	3/0	12/0
Total	-	**8(15)**	**32/0**	**40/15**	**32/0**	**20/0**	**8(12)**	**20/0**	**12/0**	**3/0**	**12/0**

Container transportation from Poti by Logistic-Express. April.1997.

N of Rolling stock	Departure	Container			Amount of wagons	DIRECTION					
						Azeri			*Central Asia*		
		20'	40'	Total		Wagon	20'	40'	wagon	20'	40'
1.2001	04/04,24:45	12/0	-	12/0	5/0	2/0	4/0	-	3/0	8/0	-
2.2001	18/04,20:40	14/0	-	14/0	5/0	-	-	-	5/0	14/0	-
3.2001	25/04,24:00	15(3)	1/0	16(3)	8/0	3/0	3(3)	1/0	5/0	12/0	-
Total	-	**41/3**	**1/0**	**42/3**	**18/0**	**5/0**	**7(3)**	**1/0**	**13/0**	**34/0**	-

Container transportation from Poti by Logistic-Express. May.1997.

N of Rolling stock	Departure	Container			Amount of wagons	DIRECTION					
						Azeri			*Central Asia*		
		20'	40'	Total		Wagon	20'	40'	wagon	20'	40'
1.2001	09/05,22:44	31/4	8/0	39/4	18/0	9/0	20(4)	1/0	9/0	11/0	7/0
2.2001	16/05,01:50	4/0	-	4/0	2/0	1/0	2/0	-	1/0	2/0	-
3.2001	24/05,24:00	21/0	-	21/0	7/0	1/0	3/0	-	6/0	18/0	-
4.2001	30/05,22:20	28/0	7/0	35/0	20/0	8/0	12/0	2/0	12/0	16/0	5/0
Total		**84/4**	**15/0**	**99/4**	**47/0**	**19/0**	**37/4**	**3/0**	**28/0**	**47/0**	**12/0**

Container transportation from Poti by Logistic-Express.

N of Rolling stock	Departure	Container			Amount of wagons	DIRECTION				
								Central Asia		
		20'	40'	Total		Wagon	40'	wagon	20'	40'
1.2001/3301	3/07. 13:55	21	9	30	18	-	-	18	21	9
2.2001/3303	13/07. 17:40	21	-	9	9	-	-	9	21	-
3.2001	23/07. 10:17	37	-	37	14	-	-	14	37	-
4.2001	-	-	-	-	-	-	-	-	-	-
5.2001	-	-	-	-	-	-	-	-	-	-
Total	-	**79**	**9**	**67**	**41**	-	-	**41**	**79**	**9**

Container transportation from Poti by Logistic-Express. August.1997.

N of Rolling stock	Departure	Container			Amount of wagons	DIRECTION					
						Azeri			*Central Asia*		
		20'	40'	Total		Wagon	20'	40'	wagon	20'	40'
1.3301	3/08,17:07	6/0	-	6/0	2/0	-	-	-	2/0	6/0	-
2.3303	05/08,03:40	25/0	1/0	26/0	11/0	3/0	6/0	1/0	8/0	19/0	-
3.3307	09/08,15:25	2/0	-	2/0	1/0	-	-	-	1/0	2/0	-
4.3301	13/08,02.25	1/0	1/0	2/0	1/0	1/0	1/0	1/0	-	-	-
5.3301	16/08,12:05	2	-	2	1	-	-	-	1	2	-
6.2201	21/08,19:50	20/0	-	20/0	18/0	2/0	4/0	-	16/0	32/0	-
7.3305	25/08,07:02	14/0	-	14/0	6/0	2/0	4/0	-	4/0	10/0	-
Total	-	**70/0**	**2/0**	**72/0**	**40/0**	**8/0**	**15/0**	**2/0**	**32/0**	**71/0**	-

Container transportation from Poti by Logistic-Express. September.1997.

N of Rolling stock	Departure	Container			Amount of wagons	DIRECTION					
						Azeri			*Central Asia*		
		20'	40'	Total		Wagon	20'	40'	wagon	20'	40'
1.2001	01/09,14:45	48/0	-	48/0	-	-	-	-	24/0	42/0	-
Total		**48/0**		**48/0**					**24/0**	**42/0**	

Container transportation from Poti by Logistic-Express. Nov-Dec.1997.

N of Rolling stock	Departure	Container			Amount of wagons	DIRECTION								
						Azeri			*Central Asia*			*Armenia*		
		20'	40'	Total		Wagon	20'	40'	wagon	20'	40'	wagon	20'	40'
1.3301	8/12,3:05	24	18	42	21	-	-	-	21	24	18	-	-	-
2.3303	3/12.05:53	8	-	8	3	-	-	-	3	8	-	-	-	-
3.3303	4/12,05:50	28	4	32	14	6	8	4	3	6	-	5	14	-
4.3303	07/12,01:30	5	-	5	2	-	-	-	-	-	-	2	5	-
5.3305	10/12,05:30	12	12	245	12	-	-	-	12	12	12	-	-	-
6.3307	16/12,15:50	20	2	22	9	6	13	2	2	5	-	1	2	-
7.3301	12/12,01:00	5	-	5	2	-	-	-	2	5	-	-	-	-
8.3301	18/12,03:25	6	-	6	3	-	-	-	6	-	-	-	-	-
9.3301	19/12,01:25	10	-	10	4	-	-	-	4	10	-	-	-	-
10.3303	20/12,03:45	17	2	19	7	1	1	1	6	16	1	-	-	-
11.3301	23/12,23:20	8	8	8	-	-	-	-	-	-	-	8	8	8
12.3305	25/12,15:20	2	-	2	1	-	-	-	1	1	-	-	-	-
13.3307	]26/12,07:15	9	-	9	3	-	-	-	-	-	-	3	9	9
14.3305	30/12,04:50	44	-	44	16	-	-	-	-	-	-	16	44	-
15.3307	30/12,07:07	2	-	2	1	-	-	-	1	2	-	-	-	-
Total		202	46	248	99	13	22	7	62	89	21	35	82	17

Total amount of containers, transported by Logistic-Express from January to December 1997.

Containers, wagons	Armenia	Azerbaijan	Asia	Total by all countries
20'	82	89	365	536
40'	17	39	68	124
Wagons	35	65	212	312
Total containers	99	128	433	660

The main reasons to stop the TCLE service are the following:

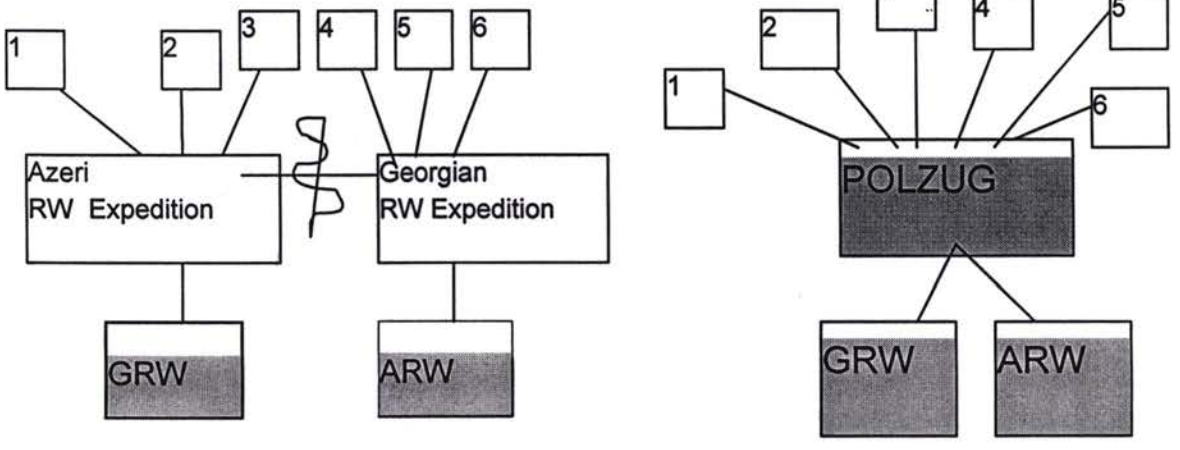
1. The two RW State Freight Forwarder's Companies Azerjeldorexpedition (Azeri RW Expedition) and Gruzjeldorexpedition (Georgian RW Expedition.) had no real commercial responsibility and were not linked under a common body. Marketing and financial operation were not harmonised and even the money transfer, outstanding invoices and clearance between the two companies had caused a lot of misunderstanding among the organisations themselves, customers and freight forwarders.

2. Absence of the terminal service on the terms door to door.

3. In Poti Port were only one representative of "Gruzjeldorexpedition" and it was nearly impossible to organise marketing and adequate normal working conditions.

4. Absence of marketing in Europe and Central Asia.

5. The drawing below shows the differences between the TCLE and the POLZUG concept.
The numbers indicate customers.



Annex 2
Legal Basis for the Foundation of a Company

Establishment of a joint Ltd Company with foreign and Georgian partners:

Required documents:

From the FOREIGN COMPANY

1. Notarial attestation of the Charter of the company, (translation into Georgian or Russian of the same and notarial attestation of the translation), legalisation
2. Extract from the register, notarial attestation; (translation into Georgian or Russian of the same and notarial attestation of the translation), legalisation

From the GEORGIAN COMPANY

1.Charter of the company, certified by notary
2. Extract from the register, certified by notary

General documents;

1. Certification by notary of the act of the founders about the opening of the Ltd, about the defining of the equity capital (translation of the same which has to by certified by notary)
2. 5 copies of the Charter, notaries attestation;
3. Decision about appointing the Director of Ltd, certified by notary
4. Declaration in address of the court, certified by notary
5. Sample of the signature of the Director, certified by notary
6. Registration receipt - Laries equal to 80 US$
    a) 50% to the local budget
    b) 50% to the Department of Material-technical support of the Supreme Court
7. Conclusion of the audit if the equity capital is not in cash

The Declaration in address to the court should consist of:

a. Company name
b. Organisational-legal form
c. Place of location (legal address)
d. Field of activity
e. Data for the beginning of the fiscal year and for the end of the year;
f. Name, Surname, date of birth, place of birth profession and living place of each partner; if the founder is a legal entity: name of his company and registration data
g. Authorisation to representative
h. Document about the appointing the director
i. Amount of the Equity (Charter) capital and the document confirming this instalment (minimum 2000 laries)
j. Amount of the instalment of each founder partner, correspondingly the share
k. Name, Surname. date of birth, place of birth, profession and living place of each director

Company Registration for the Intermodal Service Operator

To set up the final operator for the Intermodal Service an official registration of such an operating entity is necessary. To be in the position to work with branch offices in Armenia as well as in Azerbaijan, the registration should be made in Georgia.

Below the possibilities and the steps to be taken are described:

Legal Forms of companies

The most wide spread legal form of a Georgian enterprise is the limited company, the so called Ltd. The foundation of a Ltd is possible by a foreigner (non-Georgian citizen), Georgian citizens and a mixture of both (joint ventures)

It is recommended by competent lawyers, that, if the foreign company is going to offer serious forwarding services on the TRACECA route, to establish a Ltd Company.

As an alternative it was discussed to establish a branch office. Such a branch office is not a legal entity.

Below the functions of a Ltd are described:

1) Ltd is a society established by the uniting the capital. This capital can be both in cash and in assets.
2) Ltd is a legal entity
3) Ltd is liable to the creditors only by its capital,
4) Ltd can be established both by physical and legal entities. The founder of the company can be the State, too.
5) Ltd can establish a branch office
6) Ltd partners are not responsible for the obligations of Ltd
7) Existence of the Ltd does not depended on the number of the partners,. if a partner leaves Ltd, this does not cause it's automatic break.
8) Ltd has independent organisational bodies
    a) Meeting of the Partners,
    в) Directorate
    c) Supervisory Board (if considered to be necessary)

   members of these bodies can be persons from outside the company.
9) It's equity capital should be minimum 2000 Laries.

Establishing of the Ltd Company by a foreign company

Required documents:

1. Certification by notary of the Charter of the company (translation of the same and certification of translation by notary)
2. Extract from the register, certified by notary (translation of the same and certification of translation by notary)
3. Certification by notary of the act of the founders about the opening of the Ltd, about the definition of the equity capital (translation of the same and certification of translation by notary)
4. 5 copies of the Charter, certified by notary
5. Decision about appointing the Director of Ltd, certified by notary
6. Declaration in address to the court, certified by notary
7. Sample of the signature of the Director, certified by notary
8. Registration receipt - Laries equal to 80 US$
   a) 50% to the local budget
   b) 50% to the Department of Material-technical support of the Supreme Court;
9. Conclusion of the audit if the equity capital is not in cash;

All the above documents should be translated into Georgian or Russian and legalised.

If any of these documents are issued in Georgia it should have certification by notary.

The Declaration in address of the court should consist of:

a. Company name
b. Organisational-legal form
c. Place of location (legal address)
d. Field of activity
e. Data for the beginning of the fiscal year and for the end of the year;
f. Name, Surname, date of birth, place of birth profession and living place of each partner, if the founder is a legal entity name of his company and register data;
g. Authorisation to representative
h. Document about the appointing the director;
i. Amount of the Equity (Charter) capital and the document confirming this instalment (minimum 2000 laries);
j. Amount of the instalment of each founder partner, corresponding to the share;
k. Name, Surname. date of birth, place of birth, profession and living place of each director

Annex 3

Training Reports

Annex 3 - 1

Driver and Terminal Organisation Training in Baku

Driver Training Port of Baku

The training for operations personnel of the container terminal in the Port of Baku was conducted with special regard to future intermodal container handling. The training took place at the new container yard which was set up and financed by means of the Tacis-Traceca Programme. The equipment with which the training was carried out were mainly a 40 t fork lift and a reach stacker for container handling. This equipment was also financed by Tacis - Traceca.

Members of Training Programme - 25.2.99 –'4.3.99

First Group	Second Group	Third Group	Fourth Group	Maintenance/ Service-Group
Kiamal	Sevindik	Allahshukür	Abdulali	Hashim
Rashid	Bakhthyar	Safar	Akhmed	
Elshan	Yusif	Saadat	Tehran	
			Ali	

In total 14 employees have been trained during this training.

Schedule of Training Lessons

Date	Time	Lesson	Location
Thursday, 25.02.	10.00 - 12.00	• Introduction • Safety-Regulations • General Advices • Fixing of schedule	Training department
	13.00 - 15.00	• first practical Training	Container Yard
	15.00 - 16.00	• Recapitulation	- " -
Friday, 26.02.	10.00 - 12.00	• Practical Training	Container Yard
	13.00 - 16.00	• - " -	- " -
	16.00 - 17.00	• Maintenance Advice	- " -
Saturday, 27.02.	10.00 - 12.00	• Practical Training	Container Yard
	13.00 - 15.00	• - " -	- " -
	15.00 - 16.00	• Recapitulation of Safety regulations	- " -

Date	Time	Lesson	Location
Sunday, 28.02.	09.00 - 12.00 12.00 - 13.00	• Practical Training • General Advise on operational management	Container Yard Port office
Monday, 01.03.	10.00 - 12.00 13.00 - 16.00 16.00 - 17.00	• Practical Training • - " - • Special training for assistants	Container Yard - " - - " -
Tuesday, 02.03.	10.00 - 12.00 13.00 - 15.00 15.00 - 16.00 19.00 - 21.00	• Practical training • - " - • Recapitulation • Training of night operations	- " - - " - - " - - " -
Wednesday, 03.03.	10.00 - 12.00 13.00 - 15.00 15.00 - 17.00	• Special training lower level • Special training lower level • Co-operation and communication for workshop and operations managers	Container Yard - " - Port office
Thursday, 04.03.	09.00 - 12.00 13.00 - 15.00 15.00 - 16.00 16.00 - 17.00	• Practical examinations • Theoretical examinations • Conclusion of training course • Celebration for drivers certificates	Container Yard Training department - " - - " -

A total of 46 lessons has been given to the container terminal operators.

Training Lessons in particular phases

During the training several special aspects have been trained. In the beginning a theoretical introduction with definition of the training schedule has been given and the objectives of the training discussed.

Further, the equipment has been studied. The functions in general as well as the technical maintenance and checking programme were explained.

Special regard was given to safety aspects. Safety regulation were explained and examples of realistic situations according to real operations given.

The terminal had been inspected with special attention to barriers, signs, traffic flow and surface damages and their consequences for the terminal equipment.

Practical Training

Preparation phase

- Checking of bolts, nuts, leaks, damages, lights, tyre-pressure, hydraulic systems
- Checking the content of all liquids (engine-,gear-,hydraulic-oil, cooling system, window-washer)
- Checking of all instruments in the cabin, explanation of warning lights and right scales of temperatures and pressures, hints for workshop-information in case of wrong items
- Hand out of instruction manual for all drivers (short form including some explanations in English / Russian)
- Starting of engine and first test of brake reaction

Phase I in practice

- Driving forward/backward, circles, bends without cargo
- Surrounding some barriers
- Forward/backward through barrel-gates (for being familiar with equipment dimensions)
- Brake-test from different speeds (estimation of drivers how long the braking distances are)
- Recapitulation of Safety-Regulations
- Estimation of angles where the drivers have no view of
- Avoiding of damaged surfaces which can hurt the tyres
- Examples of communication with other vehicle drivers at the Terminal

Phase II

Training with empty Containers

- Driving and lifting functions in general
- Spreader-functions 20'/40', sideshift, middle positioning etc.
- Lock light functions
- Positioning of Containers from and to ground area

Phase III

- Loading/discharging from railway-platform
- Loading/discharging from truck and chassis
- Double stack in empty stock

Phase IV

Empty and full Containers 20' and 40'

- Loading and discharging direct between railway and truck
- Driving independently without trainers assistance
- Exactly positioning on marked angles
- Optimising of road distances- sharing long distances between truck and Reachstacker

Intermediate Step between Phase IV and V : recapitulation of technical checks and Safety Regulations

Phase V

- Independently building of an empty stock block storage of 8 Containers, double stack
- Manoeuvring on narrow space
- Lifts from second tiers over first tiers
- Triple stacks (experts only)
- Night training (experts only)
- Selection of drivers for further education as assistant trainers
- Special training for drivers with lower level of driving experience

Phase VI

- Practical examination
- Theoretical examination
- Evaluation of training course
- Conclusions
- Celebration of the handout of drivers certificates

Annex 3 - 2

Driver and Terminal Organisation Training in Poti

Driver Training Port of Poti

The training for operations personnel of the container terminal in the Port of Poti was conducted with special regard to future intermodal container handling. The training took place at the container yard which was set up and financed by means of the Tacis-Traceca Programme. The equipment with which the training was carried out were mainly a 40 t fork lift and a reach stacker for container handling. This equipment was also financed by Tacis - Traceca.

Members of Training Programme - 20.6.99 – 25.6.99

First Group	Second Group
Gagua Emsar	Gedenidze Nugsar
Jalagonia Murad	Gogia Chvitscha
Sarkua Eduard	Kwartzkelia Wachtang

In total 6 employees have been trained during this training.

Schedule of Training Lessons

Date	Time	Lesson	Location
Sunday, 20.06.	10.00 - 12.00	• Introduction • Preparation of equipment • General Advices • Fixing of schedule	Training department
	13.00 - 16.00	• safety regulations • Operation instructions	Training department
Monday, 21.06.	09.00 - 12.00	• Practical Training	Container Yard
	13.00 - 16.00	• - " -	- " -
	16.00 - 17.00	• Maintenance Advice	- " -

Date	Time	Lesson	Location
Tuesday, 22.06.	09.00 - 12.00 13.00 - 16.00 16.00 - 17.00	• Practical Training • - " - • Recapitulation. of safety regulations	Container Yard - " - - " -
Wednesday, 23.06.	09.00 - 12.00 13.00 - 15.00 15.00 - 16.00	• Practical Training • - " - • General Advise on operational management	Container Yard
Thursday, 24.06.	09.00 - 14.00 21.00 - 23.00	• Special training for assistants and lower level of drivers • Training of night operations	Container Yard Container Yard
Friday, 25.06.	10.00 – 11.00 13.00 – 15.00 15.00 – 16.00	• Theoretical examination • Practical examination • Conclusion of trainings course and celebration for drivers certificates	Training department Container Yard Training department

A total of 38 lessons has been given to the container terminal operators.

Training Lessons in particular phases

During the training several special aspects have been trained. In the beginning a theoretical introduction with definition of the training schedule has been given and the objectives of the training discussed.

Further, the equipment has been studied. The functions in general as well as the technical maintenance and checking programme were explained.

Special regard was given to safety aspects. Safety regulation were explained and examples of realistic situations according to real operations given.

The terminal had been inspected with special attention to barriers, signs, traffic flow and surface damages and their consequences for the terminal equipment.

Practical Training

Preparation phase

- Checking of bolts, nuts, leaks, damages, lights, tyre-pressure, hydraulic systems
- Checking the content of all liquids (engine-,gear-,hydraulic-oil, cooling system, window-washer)
- Checking of all instruments in the cabin, explanation of warning lights and right scales of temperatures and pressures, hints for workshop-information in case of wrong items
- Hand out of instruction manual for all drivers (short form including some explanations in English / Russian)

- Starting of engine and first test of brake reaction

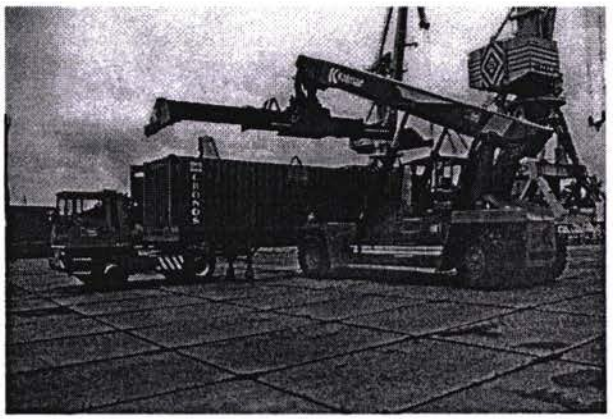
Phase I in practice

- Driving forward/backward, circles, bends without cargo
- Surrounding some barriers
- Forward/backward through barrel-gates (for being familiar with equipment dimensions)
- Brake-test from different speeds (estimation of drivers how long the braking distances are)
- Recapitulation of Safety-Regulations
- Estimation of angles where the drivers have no view of
- Avoiding of damaged surfaces which can hurt the tyres
- Examples of communication with other vehicle drivers at the Terminal

Phase II

Training with empty Containers

- Driving and lifting functions in general
- Spreader-functions 20'/40', sideshift, middle positioning etc.
- Lock light functions
- Positioning of Containers from and to ground area



Phase III

- Loading/discharging from railway-platform
- Loading/discharging from truck and chassis
- Double stack in empty stock

Phase IV

Empty and full Containers 20' and 40'

- Loading and discharging direct between railway and truck
- Driving independently without trainers assistance
- Exactly positioning on marked angles
- Optimising of road distances- sharing long distances between truck and Reachstacker

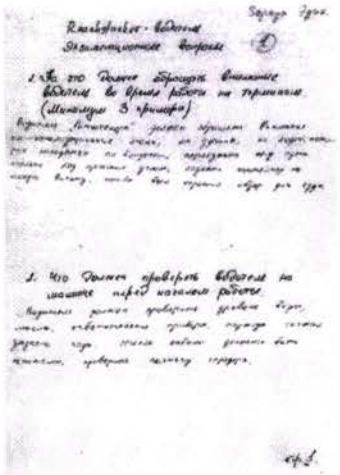
Intermediate Step between Phase IV and V : recapitulation of technical checks and Safety Regulations

Phase V

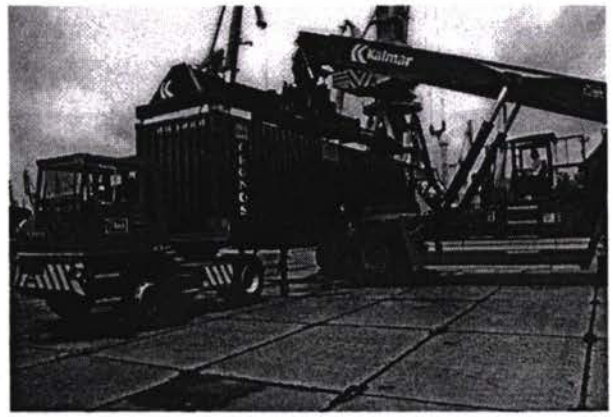
- Independently building of an empty stock block storage of 8 Containers, double stack
- Manoeuvring on narrow space
- Lifts from second tiers over first tiers
- Triple stacks (experts only)
- Night training (experts only)
- Selection of drivers for further education as assistant trainers
- Special training for drivers with lower level of driving experience

Phase VI

- Theoretical examination
  1. What has the driver pay attention to during his work on the terminal (minimum 3 examples)
  2. What does the driver have to check on the equipment before the start of the work?.
  3. Explain the particularities of container stacking and give a graphical example of a container stack of 20' containers in 4 rows
  4. Explain the meaning of the light signals (2[x] yellow and red).
  5. Practical expample. Explain the interrelationship of the driver of a Reachstacker and the driver of a forklift during the loading of railway wagons / platforms with containers (3 x 20`) in detail.



- Practical examination
  1. Control of the equipment before work.
  2. Stacking of 4[x] containers.
  3. Loading and discharging of 40' containers on a platform.



- Evaluation of training course
- Conclusions
- Celebration of the handout of drivers certificates

Annex 3 - 3

Seminar on Marketing and Business Planning

List of Participants

Gudauri. 7-15 June, 1999

Name	Position
Georgia	
1. Abesadze Asmat	Tbilisi Intermodal Organisation
2. Chkhartishvili Zviad	Port of Poti. Head of Marketing Department.
3. Gvaberidze Gela	Poti RW. Head of Container and Package cargo transportation Department.
4. Kiknadze Mamuli	Deputy Head of Ltd "Georgian RW". Head of Marketing and Container Transportation Department.
5. Korchilava Korneli	Poti Intermodal Organisation
6. Kurtanidze Pavel	TRANSGEORGIA
7. Rostomashvili Zviad	Tbilisi Intermodal Organisation
8. Shagidze David	TRANSGEORGIA
9. Shengelia Aza	Poti Intermodal Organisation
10. Zakharaia Gogi	Poti Custom Department. Cargo Transport Guide.
Azerbaijan	
11. Agaeva Emilia	Baku Intermodal Organisation
12. Mirgulamov Raphail	Baku Port. Head of Commercial Department.
13.. Khalygov Elshad	Caspian Shipping Company. Deputy of Head of Foreign Economy Affairs.
Armenia	
14. Gevorkian Artur	Armenian RW. Engineer of Transportation Department.
15. Harutunian Mesrop	Head of Karmir-Blur point territory.
16. Ter-Karapetian Nicolai	Head of Expedition group.
17. Martirosian Mger	Armenian Customs. Chief Specialist of Custom's procedure facilitation and Statistics Department.

Contents of the Seminar

On 7-15 June 1999 a Seminar on Marketing and Business Planning was held in Gudauri, Georgia for participants from the Caucasian States of Armenia, Azerbaijan and Georgia.
The participants arrived in Gudauri on 7 June 1999. The seminar sessions started on 8, June, 99 at 10 a.m.

This report gives a short introduction about the contents and the specific subjects of the seminar. In addition to the lectures given, all lessons and discussions were accompanied by practical examples and a high involvement of the participants of the seminar. Persons were at any time requested to give own opinions, impressions and examples.

Cost structures

The following costs and the influence and importance of this costs were presented and in examples explained:

- Fixed cost
- Variable cost
- Total cost
- Fix cost digression

Reference was made to the theories of Adam Smith and Karl Marx . In addition, the Break Even Point and the Profit was subject of the training. Formulas and graphics/illustration as well as practical examples have made the subject very clear. The relation between costs, utilisation and cost structure to marketing and promotion were explained by examples of the companies "PHILIPPS" and "Wall Mart Supermarkets Net".

Customer needs

In a case study the participants of the seminar described real customer needs of a dummy company (the so called Chekhov Pumps Company) and developed a plan to solve customer problems. This was done in three different groups and the results were discussed and commented.

Marketing

The different types of markets (consumer, retailer public and reproduction), market segments and target groups have been explained by using real examples (Unilever, IBM) and the participants were requested to define the target groups for their companies.

Further, the Product Life Cycle (PLC) was explained

The marketing tools (The Four P's: Product, Promotion, Price, Place) were intensively explained and discussed.

- Product Mix
- Product plus
- Value
- Package
- Quality
- Assortment
- Advertising
- Personal selling
- Public relations
- Promotion

Promotion Mix

- Public Relation
- Stake Holder Mapping

Price Mix

- "Right" price and the triangle of "Right" price
- Discounts
- Types of financing

Place Mix

- "Pipeline" to the client
- One single place or several places

The different definitions were always explained in detail, participants were always requested to identify the corresponding positions, identifications or definitions for their companies. (e.g. internal and external Stake Holders)

The definition of Best price and maximal profit was explained and a definition of the "Four P's" for ports were elaborated in the following way:

- Geographical position
- Nautical approach
- Hinterland connection
- Disposition of quays + land
- Labour force
- Know how
- Fiscal environment
- Price
  - Estimated price
  - Currency (exchange rate of the US$)
  - Discounts (long term, quantity, quality, paying in time, time discounts)

- Terms of Payment
- Promotion
- Advertising
  - Target Group
  - Media
  - Head Line
  - Logo
- Direct marketing
  - Phone marketing
  - Mailing
- Personal Selling
- International exhibitions
- Organising Port days
- Representatives
- Domestic network
- Fairs (domestic)
- Participation in seminars and schooling
- Organising Conferences
- Speaker at other Conferences
- Others, (e.g. welcome points or local tools)

In addition to the principles of marketing the marketing for monopolies / Cartels and Outsiders was discussed. Reference was made to Engel'sche Law; BCG – Boston Consulting Group and a system to define the place of a company on the market (Stars, Cash Cow, Poor dogs, nobody knows, what can happen).

Productivity of work

As an example the Japanese and German car production was explained. In addition to this the notion of outsourcing was explained.

Definition of Core Competency

The core competency and the additional competency was discussed and the participants were requested to define their core and additional competencies.

Management

The different methods of management were explained. Examples were given. The experiences with Japanese Managers and the Ringi Sho Plan as well as the old style of European company organisation and the corresponding management structures were discussed. The new types of organisations and the different styles of management were discussed and explained.

New Types of Organisation

- Line Organisation
- Divisional Organisation
- Matrix Organisation
- KAM-Key Account Management

Different Management Styles were introduced as well as their implications on the managerial behaviour and the leadership styles.

- Leadership, Authoritarian and Co-operative Management

- Basics of Leadership
  - Functional Power
  - Positive Power
  - Negative Power
  - Expert Power
  - Referent Power

- Main activities of Managers and key factors in management and leadership
  - Open cycles
  - Piece work
  - Communication is vital
  - Do not order
  - Work's complex and uncertainty

- Managerial success (S = A + M + O)

  - Success (S)
  - Ability (A)
  - Motivation (M)
  - Opportunity to manage (O)

- Ability to Manage
  - Successful Leadership has to consider the following aspects
    - Personal approach
    - Social approach
    - Oral communication and presentation skills
    - Written communication
    - Planning and organisation
    - Information gathering, problem analyses
    - Decision making (DSS-Decision support system)
    - Delegation and control
    - Self objectivity
    - Disposition to lead

  - The Opportunity to Manage depends on:
    - The Economical, Social, Political, and Technological environment

- Motivation to manage

- Desire to be ahead
  - Favourable attitude toward those in position of authority
  - Desire to engage in games or sport competitions with peers
  - Desire to assert oneself and take charge
  - Desire to exercise power and authority over other
  - Desire to behave in a distinctive way which includes standing out from the crowd
  - Sense of responsibility in carrying out the routine duties associated with managerial work.

- Learning to Manage (The Honeywell study)

- Hard Knocks
  - Making a big mistake
  - Being over stretched by different assignments
  - Feeling threatened
  - Being stuck in an impasse or dilemma
  - Suffering an injustice at work
  - Losing out to someone else
  - Being personally attacked

- The eight attributes of excellence (according to Peeler's and Weatherman's)
  - A basis for actions
  - Close to the customer
  - Autonomy and entrepreneurship
  - Productivity through people
  - Hands and value driven
  - Stick to the knitting
  - Simple form, lean stuff
  - Simultaneous loose tight properties

- Typical decision traps for managers are
  - Framing Errors
  - Escalation of commitment
  - Overconfidence

- The "Ten minor changes for Management" moving away from / to:

Administrative
Boss / superior → Team Leader/facilitator

Role
Leader → Teacher/Coach/Sponsor

Cultural
Mono cultural → Multi cultural
Mono lingual → Multi lingual

Power basis
Formal authority → Knowledge/relationship

Interpersonal dealing		
Competition	→	Co-operation
Win-Loose	→	Win-Win
Learning		
Periodic	→	Continuously - lifetime
Problems		
Threats to be avoided	→	Opportunity to learn
Change and conflict		
Avoid	→	Anticipate channel Task force
Information		
Restricted access	→	Increase access (MIS-Management Information System)
Environmental impact		
After thought	→	Fore thought

During all lessons various explanation were given and reference were made to the corresponding literature. (e.g. Summaridge: "Reality of Manager´s job", Minsburg: "The Manager's job folklore and fact")

Annex 3 - 4

Marketing Seminar for the Port of Poti

Marketing Seminar for the Commercial and Marketing Department of the Port of Poti

16 - 20 February 1999

Contents of the Seminar

In the beginning of the seminar the participants were introduced into the basic ideas of marketing. The following topics were discussed:

- Basic means of marketing
- Calculation of transport chains with examples of pricing
- Contacts with clients and their documentation
- Statistics of commodities and market analysis
- Co-operation with partners in the transport chain

After this general introduction the participants were introduced to the idea and practical work of the Traceca corridor and its significance for the different modes of transport and the terminals.

Furthermore, lectures on means of marketing were given. The participants were acquainted with

- Market survey and market analysis
- Marketing strategies
- Price and tariff policies
- Analysis of competitors
- Acquisition of clients
  - commodity related
  - related to the transport area
  - related to the service and capacity

Also, the topic of determining and contacting partners and sub-contractors in the transport chain was discussed with the participants as well as the definition of the own area of work. Related to the definition of the own work the participants were familiarised with the necessity to develop a clearly defined business strategy and define the services they want to offer. The idea and definition of "Value Added Services" was also introduced.

During this seminar the subjects were mainly discussed in general and broad ideas were given. It showed that the participants were very eager to learn about modern marketing ideas but had so far themselves received very little training in this matter. Thus, they were rather inexperienced in practical marketing.

Annex 4 - 1

Services and Information Systems for Container Transportation by Rail in Germany

Table of Contents

1 General Overview

On 1 January 1994 the "Gesetz zur Neuordnung des Eisenbahnwesens" (Law concerning the restructuring of the railway system) was enacted. It was the base for the foundation of the "Deutsche Bahn Aktiengesellschaft" – DB AG – (German Railway Limited Company) which took place at the same time. This is generally known as "railway reform".

The privatisation of the state company Deutsche Bundesbahn / Deutsche Reichsbahn opened the way for a market economic orientation, which will meet the demands of future traffic markets.

Linked to the privatisation was a strict separation of passenger and cargo transportation. The cargo traffic department was restructured in 1996 and divided into several independent business units, for example:

- DB Cargo: general cargo, KLV-Kombinierter Ladungs-Verkehr-"Intermodal cargo transport" (100%);
- TFG-Transfracht: marketing of international overseas container transportation (100%);
- BTT Bahn-Tank Transport (50% DB AG, 50% TFG);
- Kombiwaggon: KLV-Waggons (rd.11.000 (90%) wagons, disposition of containers, maintenance, in future also inland containers, financing);
- Transa Spedition: forwarding agent for logistic services tracks/roads and storage (co-operation with 1,200 middle sized companies, 5,000 trucks);
- BahnTrans GmbH: general cargo (50% DB AG, 50% THL);
- Kombiverkehr KG: pick-a-back traffic (20.5%);
- ATG: marketing distribution of car transportation by rail (6,000 double-decker wagons);
- NuclearCargoService (100%).

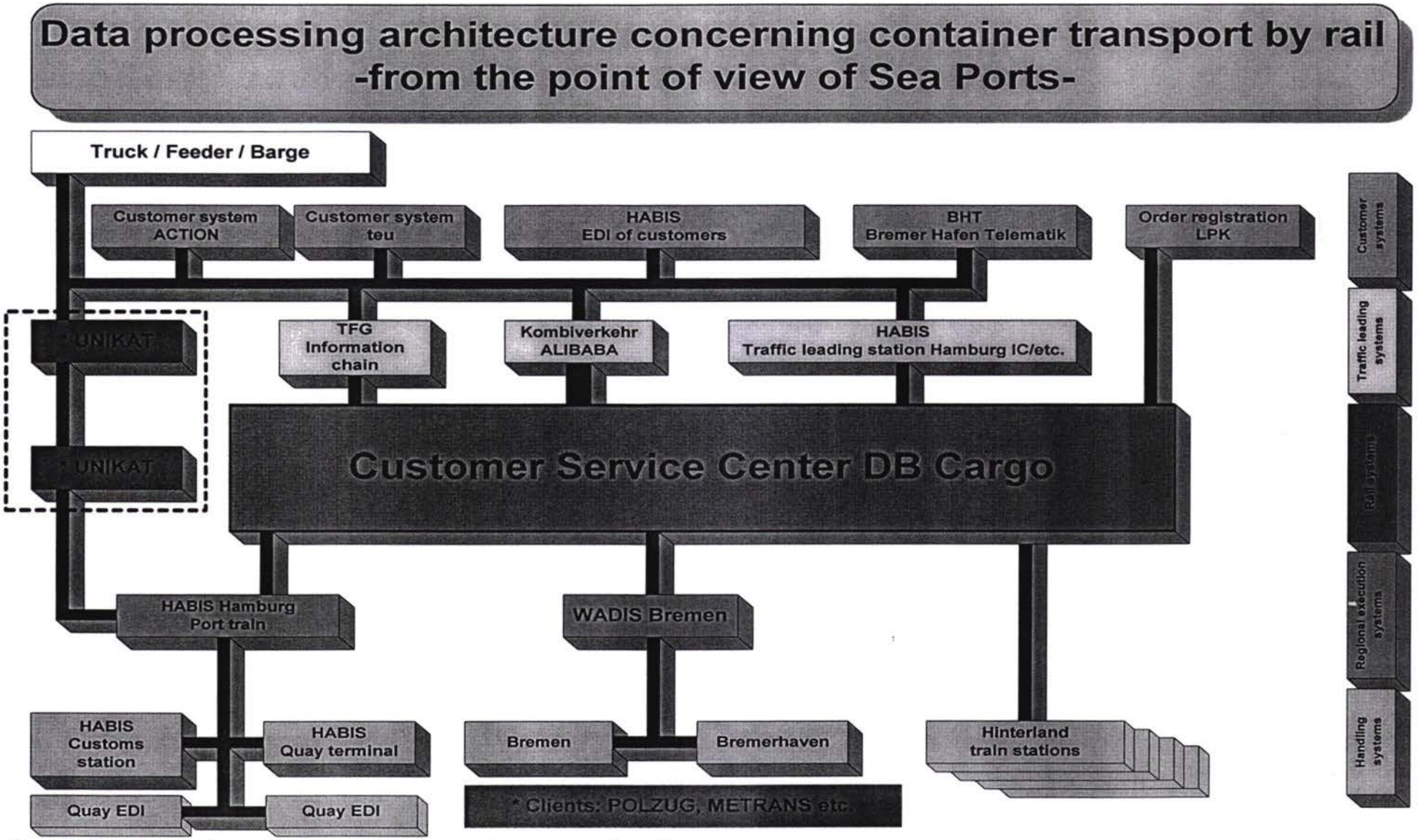


Figure 1: Data processing architecture concerning container transport by rail

2 Customer Service Center DB Cargo Duisburg

2.1 DB Cargo

In 1996, the cargo department of the Deutsche Bundesbahn was restructured and divided into several independent business units. One of those units was since 1 July 1996 DB Cargo, general cargo unit. On 1 April 1997 this unit was changed into DB Cargo Projektgesellschaft m.b.H (short DB Cargo) and is a 100% subsidiary company of DB AG.

DB Cargo offers transport and logistics services in Europe, the basic services are mainly executed by rail. At the same time reliable and guaranteed door-to-door transport services as well as more and more extensive tailor-made service packages are presented. These services are offered in a co-operational partnership with other transportation companies.

2.2 Service Areas

There are different products in the various product ranges of DB Cargo.

Block trains are distinguished as follows:

- **Logistics trains** *(consumables, capital goods, spare parts and fabricating parts)*
  Time sensitive transports, which are tailor-made for the individual customer's demands, are forwarded as logistic trains with individually adjusted time schedules. The customer's advantage is just-in-time production without any problems and therefore less storage cost.

- **Regular trains** *(especially for planable bulk goods)*
  Regular block trains are the logistics solution for the transportation of bulk goods for the coal, iron and steel industries, the building industry and the mineral oil industry.

- **Spot trains**
  Flexible trains engaged for seasonal and special transports.

Trains with individual wagons are distinguished as follows:

- **InterCargo**
  Day A - day B night train connections between chosen economical sites with guaranteed schedules. The 17 main German metropolis are connected by night trains. About 1,000 dispatching and receiving stations are served in time.

- **EurailCargo**
  International day A - day C connections up to 1,500 kilometres with guaranteed schedule. For distances longer than 1,000 kilometres, the transportation time will be prolonged by 24 hours. EurailCargo trains carry individual wagons and wagon groups between important economic hubs with the same reliability and guaranteed schedules as InterCargo.

Combined traffic is distinguished as follows:

- **InterKombiExpress**

National traffic between 20 important German economic centres is executed overnight by fast InterKombiExpress trains. They are loaded late in the evening on the terminals and arrive as direct trains for more than 60 connections early in the morning. For example: Closing time in Hamburg-Billwerder is 07.15 pm / arrival in Munich-Riem is 05.50 am.

- **InterKombi**

InterKombi is the offer for time sensitive combined cargoes by night train for a distance up to 500 kilometres in Germany.

- **EurailKombi**

In Europe there are border-crossing direct trains – EurailKombi – that connect various European economical centres. They offer attractive schedules to economic centres.

2.3 Customer Service Centre DB Cargo

The Customer Service Centre is the heart of customer service for cargo transportation of the Deutsche Bahn AG and the central interface for communication with the customer. In the 220 meter long and 18 meter high building in Duisburg-Wedau state-of-the-art data processing equipment is located. The programmes for this customer service were in main parts developed by DB Cargo and are continuously updated. Since summer 1997, 620 employees are contact persons for the customers – 24 hours per day, 7 days per week. In future, 1,350 employees of DB cargo will work here. More than 50% of the DB Cargo customers are already being served from Duisburg; until the mid 2000 all customers will receive services by the Customer Service Centre. An average of 30,000 customer contacts will then be executed daily. The service agents will be in charge for the customer from A to Z, from receiving the order and controlling it via tracing of the goods and the accompanying information up to the invoicing. Every kind of service beyond distribution and traffic that is thinkable, possible, desirable, serviceable, will be offered from Duisburg.

3 Port Train Operations and Information System (HABIS)

3.1 HABIS

HABIS, the Port Train Operations and Information System (**Ha**fenbahn-**B**etriebs- und **I**nformations**s**ystem), is a co-operation between the Free and Hanseatic City of Hamburg (FHH) and the Deutsche Bundesbahn AG (DB AG), which together run the port train in Hamburg.

HABIS connects the EDP-systems of the seaport industry with the DB AG and enables a fast and frictionless information flow between the railway's clients on the one side (forwarders, liner agents, shipping companies) and the operating companies on the other side (quay terminals etc.). All functions of transport disposition and handling are executed in a timesaving and transparent manner via HABIS. The electronic network beyond the port's borders allows nation-wide transmission of transport information which arrive on time before the corresponding trains at the receiving train station and allow a disposition on time.

HABIS not only offers advantages for railway clients and quay operators, but also optimises the operational organisation of rail by a more efficient application of working materials with the best use of the railway plants.

3.2 Handling, Service and Logistics

The main purpose of a seaport is still the handling of goods between seagoing vessels and the inland transport modes rail, truck and inland vessel. More than 70 million tonnes of goods were imported and exported via the Port of Hamburg in 1998; that is more than twice as much as 30 years ago.

During the past 20 years container traffic has been developed to a vast extend and is still increasing. More than 80% of the general cargo in the Port of Hamburg is containerised cargo.

Hamburg is still among the first of the international seaports. To hold and extend this position takes continuous improvement of services.

Due to increasing international division of labour, the demands on a modern port grow permanently. Besides their classic functions of operations, storage and transportation, Seaports, hubs for cargo traffic, are used more and more as multifunctional service centres. This includes more distinguished disposition of goods for the various clients, value added services especially designed for the demands of different customers, waste disposal and recycling offers – short: service all around the goods.

This development demands efficient systems for storage, handling and supply as well as immediate cargo delivery to the hinterland.

Provision of cargo and raw materials, value-added services and distribution of goods – without adequate logistics it would not be possible to fulfil the variety of today's demands in international trade. Logistic means controlling of cargo flows by a modern, EDP-based organisation. The object: The right amount of cargo in the right quality has to arrive at the right time at the recipient ("just-in-time" principle).

3.3 Port Train and Information Flow

Before a cargo train leaves the Port of Hamburg, it has already passed several stations. The route starts at the quay terminal, at the storage company or at a manufacturing firm's premises. Then the wagons are collected at the regional port stations and brought to one of the four main port stations. At the main port stations trains are collected which then use the network of the Bundesbahn to roll towards their destination.

To organise and execute such a dispatch of goods, a variety of information transmissions is necessary.

3.4 Flows of Goods and Information

3.4.1 Today's Procedures

The customer (Fig. 2), for example a forwarder, informs the quay terminal and the Bundesbahn about his transport order – by telephone, telex or telefax. He sends his bill of lading by courier to DB respectively to Transfracht (TFG; DB's subsidiary company in charge of container transportation). The bill of lading is checked and cleared at TFG and the customs office. After the document has been sent back to the customer – again by courier – it is send to the quay operator. The operator orders the necessary amount of wagons at the DB. After the wagons have been loaded, the bill of lading accompanies the train, which carries "its" cargo, to the destination station. Additionally, the wagon document contains information about the kind and destination of the cargo. The recipient receives the documents only after the cargo has arrived at the destination.

The information flow does not work without EDP. The DB provides modern ways of communication: FIV (Pre-information and pre-warning system for vehicles, CVM (Pre-warning system for containers) and SMW (cargo service information). CVM and SMW offer fast announcements between the dispatching and the receiving station via the central interface gateway in Frankfurt or KSZ-DB Cargo in Duisburg. Concerning parts of the container traffic, companies in Hamburg are already able to transmit transport information "online" via DAKOSY (Data communication system). Nevertheless, most of the companies involved in the transport still receive their messages via the conventional methods.

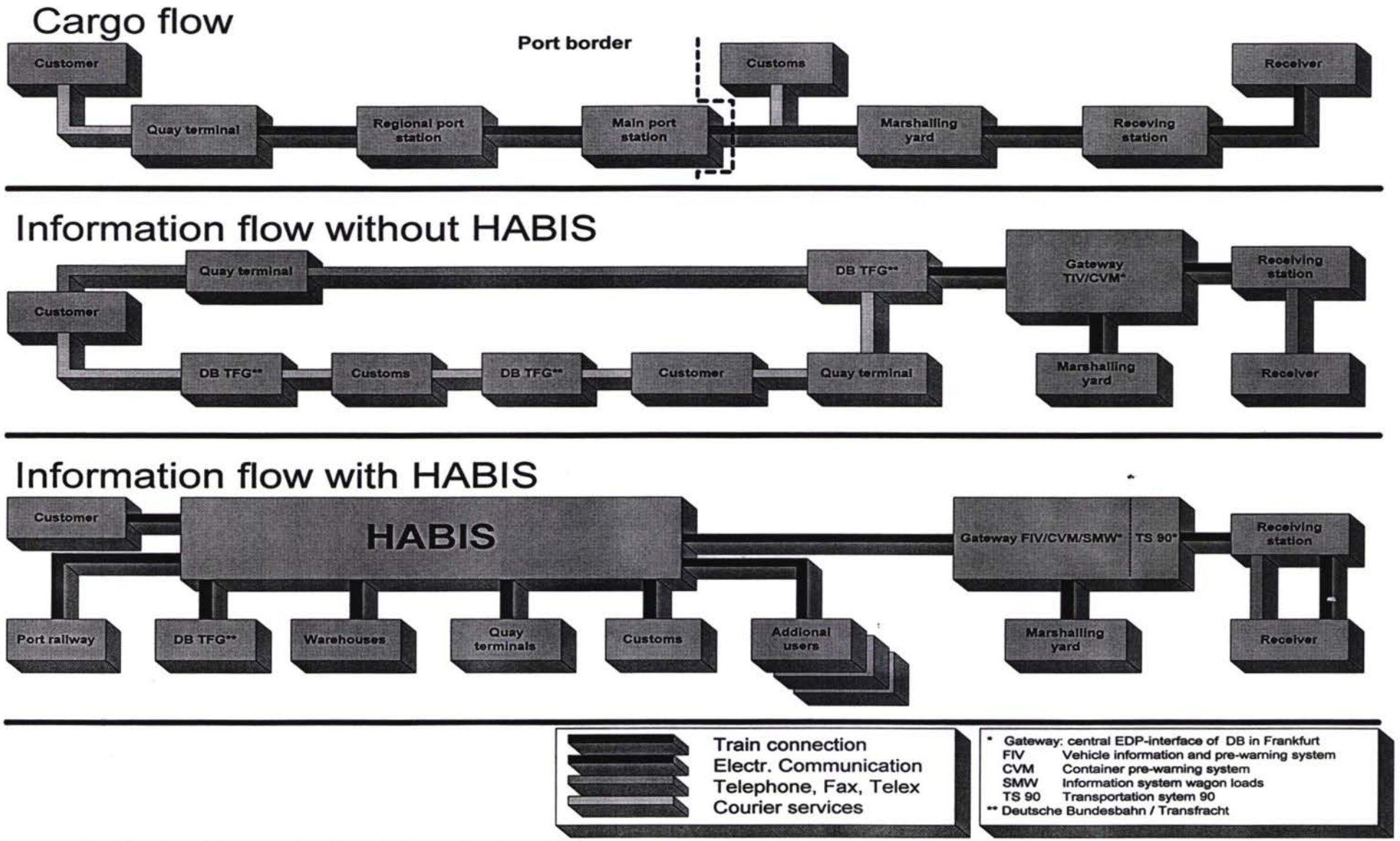


Figure 2: Simplification of the data flow through the application of HABIS

3.4.2 The Objective

To answer the demands of modern logistics, to avoid waiting periods and complicated handling of documents, to organise efficiently and to deliver in time, it is necessary to close the still existing data gaps between railway and port economy.

In order to react flexibly towards changing frame conditions, to plan efficiently and to manage correctly, it is necessary to have access to transport-proceeding information. That means, one has to know as soon as possible, where and when which cargo arrives, where it is transferred to and what transportation is needed. Therefore, it is inevitable that all parties involved in the transport process become part of an efficient information system.

3.5 HABIS-Organisation

HABIS builds the connection between the railway cargo traffic partners in the Port of Hamburg. It takes care of the transport execution. With the HABIS system, bills of lading can be handled and transmitted efficiently and status information can be sent and received.

HABIS is a new system. It is based on CONTRADIS, which is the container transport and disposition system of DAKOSY in Hamburg and which has successfully been working since 1987. The development of HABIS is supported by the research programme ISETEC (innovative seaports' technologies), which is financially supported by the State Ministry of Research and Technology and the Free and Hanseatic City of Hamburg. Besides DAKOSY GmbH also HHLA (Hamburg Port and Warehousing Corporation) and the container terminal Eurokai are involved in ISETEC.

The Hamburg Port Engineering Authority and the DB AG founded the organisation of HABIS and they also carry the costs. User of the system is DB AG. DAKOSY takes care of the EDP-technical operation of the HABIS computer centre. Since 1983, DAKOSY connects port companies in Hamburg via EDP.

The HABIS concepts and the programme structure as well as the various services are developed in a modular structure.

The central disposition office is located in the tower of the 1995 opened railway station "Alte Süderelbe". Here, the staff controls the railway station as well as even the total western part of the Port with the help of HABIS.

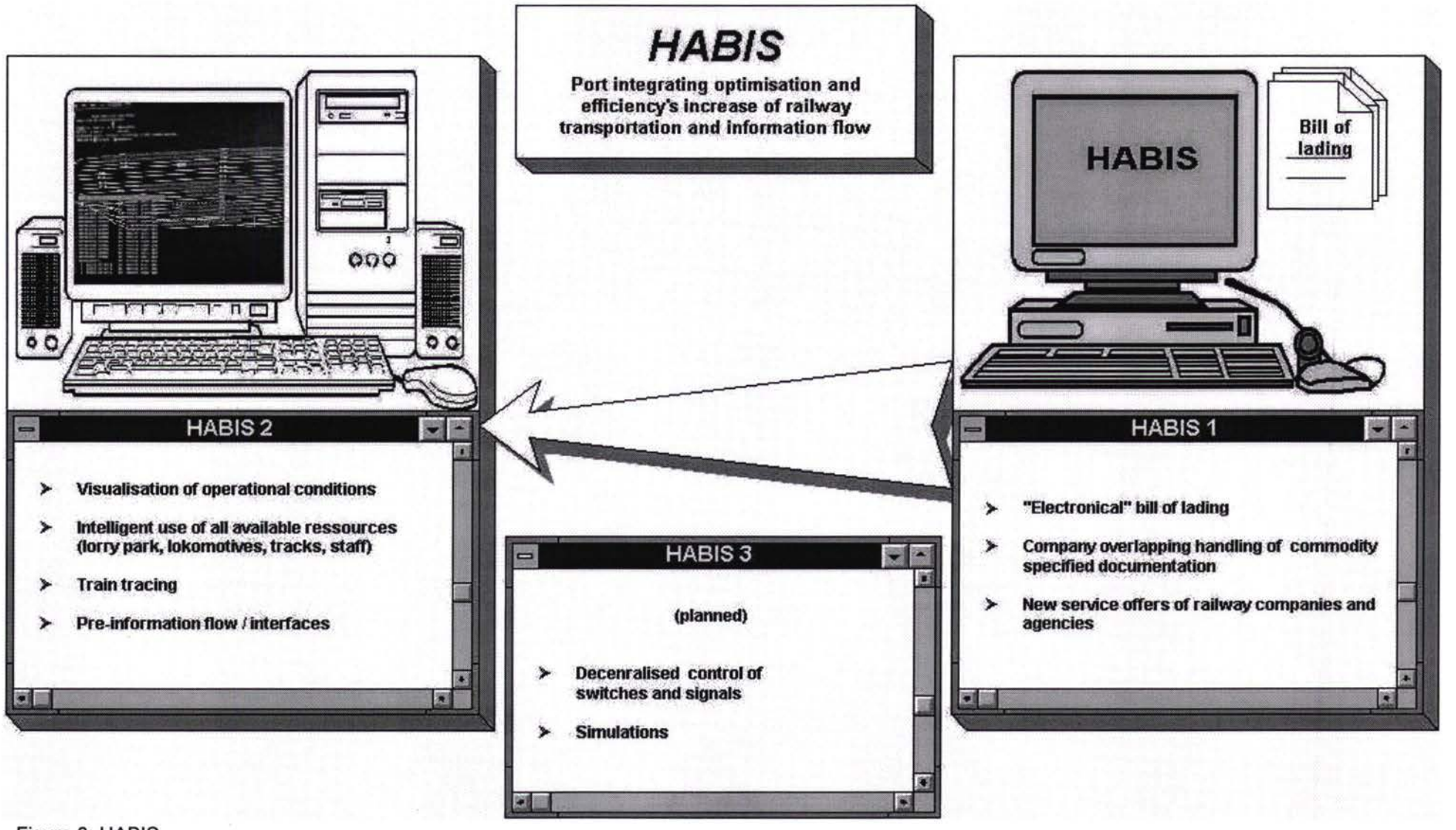


Figure 3: HABIS

In the beginning HABIS functioned for only a part of the transport execution. In a next step, HABIS optimised the information flow between the seaport economy and the railway in the port. The data HABIS made available since 1993/1994 were used to improve the operational organisation of the port railway system and to permit a demand-oriented traffic management (HABIS 2). All operational conditions, like locations of wagons and locomotives, tracks occupation, compulsory schedules changes, incoming / outgoing wagons, are recorded, examined and harmonised with each other. The integrated graphical presentations of all tracks in the various rail terminals in the port furnish the dispatching managers with real-time overview over the track and transport capacities in the port at all time. Therefore, the various rail terminals of the port can be handled as one single, big and flexible railway station.

Every company, that is already participating in the DAKOSY network can use HABIS without any problems. A direct connection to the HABIS computer centre is also possible. The only requirements are personal computers. A telephone line of the Telecommunication Company provides the online connection. If necessary, a dedicated line can be provided.

The more clients of the DB AG participate in HABIS and the various applications, the more use the system offers to all parties involved.

3.6 Service Offers

Nowadays, HABIS offers its users considerable possibilities for the rationalisation for container dispatching via rail into the inland.

The main usefulness of HABIS is the handling of transport documents by EDP. All preliminary checks, clearance procedures and complementary activities can be done immediately and simple via the HABIS computer, as well as transport registration and shunting. Clients of the DB AG know immediately, if and when sufficient empty wagons are at disposal, when their cargo can be loaded and if there is any information missing in the documents.

Forwarders, liner agents, and terminal operators gain considerable advantages from HABIS: Less data input due to continuous, company-overlapping communication, better quality of data due to inspection of the input, less courier services requirements, shorter time for handling of orders and preparation of transport, exact planning of work – all that helps to get the cargo faster on the way.

HABIS helps the transport partners as follows:

- **Railway clients:**

  Transport registration (order of wagons)
  Exemptions
  Transport contract (transport order)
  Dispatch status information (customs, DB AG, terminal operator)
  Customs pre-control

- **Customs:**
  Clearance of the transport order
  Return to the customer

Customs control
Train release

- **Terminal operator:**
  Incoming pre-information arriving wagons
  Incoming information bill of lading
  Incoming transport order
  Request for wagons
  Incoming wagon sequencing; outgoing wagon sequencing and shunting orders
  Planing and confirmation of loading
  Printing of wagon information documents

- **Deutsche Bahn AG:**
  Handling of incoming consignments
  Operations' disposition
  Inspection of empty wagons
  Reception of transport registration / order
  Disposition of dispatch
  Inspection of hazardous goods
  Exchange pre-registrations
  Bill of lading
  EDV-based operational management by HABIS

3.7 HABIS in the system network

HABIS – based on CONTRADIS and in the framework of ISETEC project 102 – was developed and tested on DAKOSY computers by a team of experts from DAKOSY, DB AG, Port Railways Organisation, Transfracht, port operators, customs). Compared with its predecessor CONTRADIS, HABIS is based on a vastly expanded and entirely different foundation. For example, screen graphics for different applications have been developed.

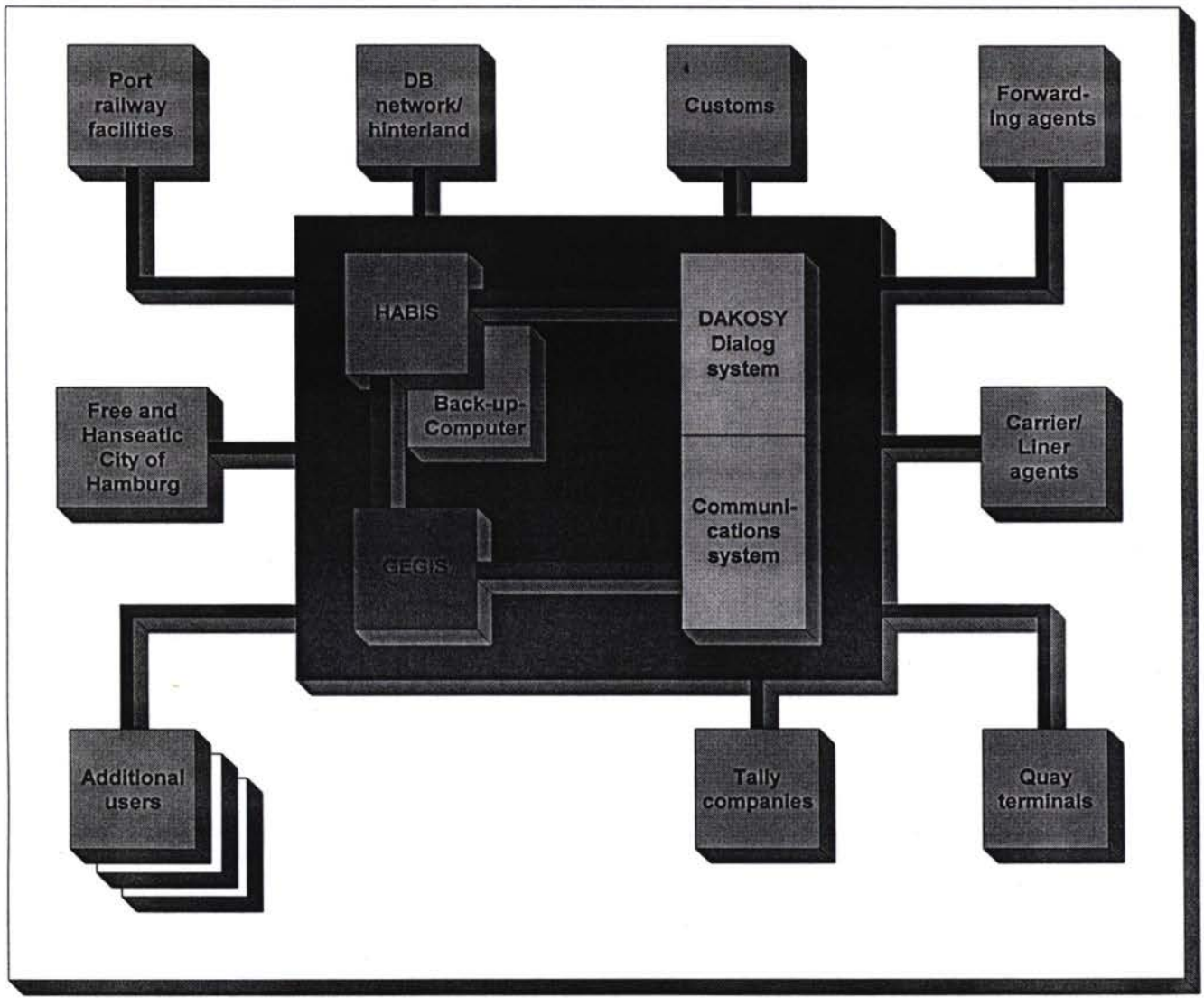


Figure 4 HABIS in the system compound

For capacity reasons, a dedicated computer has been installed for HABIS. Connected to it is a back-up system to save the data, which works as backsliding system and becomes active when required.

A "Local Area Network" (LAN) (Fig. 4) connects HABIS with DAKOSY as well as with the hazardous goods inspection system of the Hamburg police and fire-brigade (GEGIS).

Outside of Hamburg HABIS is connected online with the EDP-system of DB AG – therefore information between FIV, CVM and SMW can be exchanged.

In future, these pre-information systems will be substituted by TS 90, a de-centralised area-covering transport controlling system of the DB AG. Different from today's systems, the TS 90 can work with all data of one transport process, including bill of lading information.

For international cargo traffic HERMES is being developed, a data transmission system of the European railway administrations.

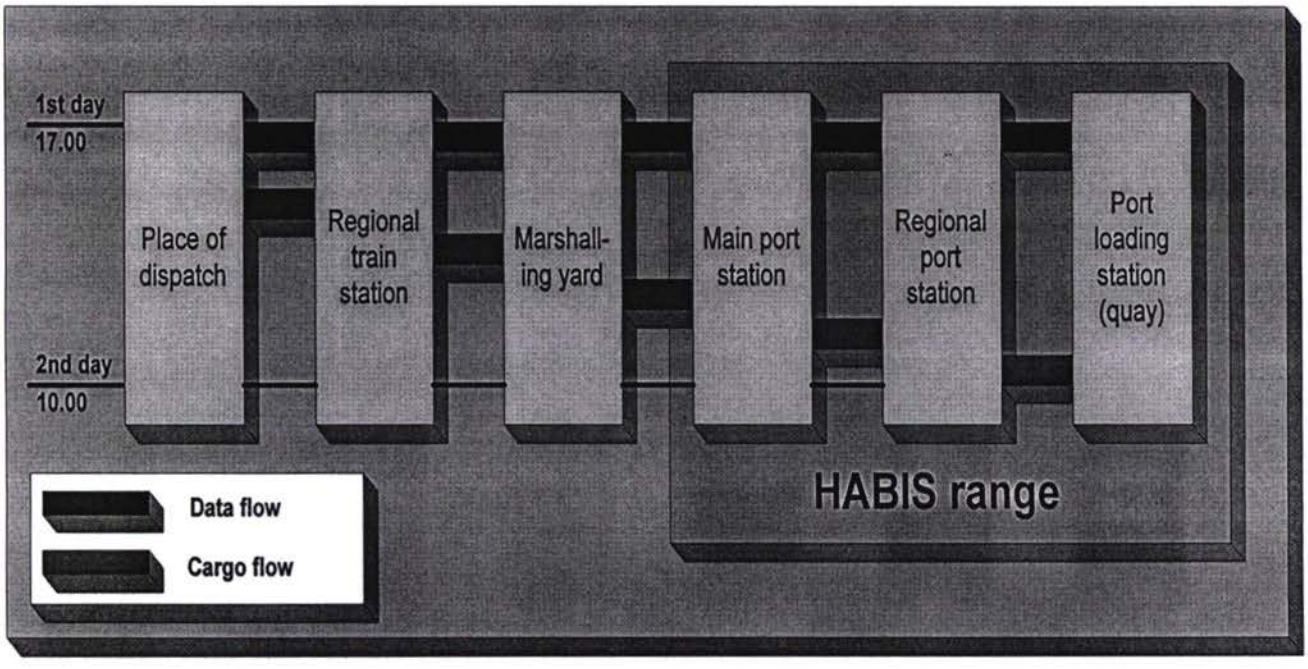


Figure 5: Pre-warning information – Hinterland connections / export

The goal of all these efforts is: EDP-based communication without any gaps between the railway customers. For the Hamburg Port economy HABIS offers the direct entrance into inter-regional communication connections which improve cargo transport on rails and, therefore, result in faster and more reliable provision of goods to customers.

In the long run the principle of transport-preceding information shall be used for all cargo trains: When the train leaves the dispatching station, the recipient can use the transport and cargo information that was transmitted already via EDP to prepare further operations and arrangements in due time.

4 POLZUG Polen-Hamburg Transport GmbH as Partner of DB AG

4.1 POLZUG

POLZUG was founded in 1991, after – due to the political changes in Eastern Europe – the traffic flows between the two German North Sea Ports – especially Hamburg – and the east-middle European hinterland increased enormously. Since then, the amount of cargo transported by POLZUG grows permanently. In 1997, about 40,000 standard containers / TEU) were carried between the German seaports and in total seven inland terminals in Poland. Besides the Hamburg Port and Warehouse Corporation (HHLA) and the Polish State Railway (PKP), a third partner has joined the Polen-Hamburg Transport GmbH (POLZUG): the cargo traffic of Deutsche Bahn AG, DB Cargo. HHLA and PKP stay shareholder with 40% each, DB Cargo has a stake of 20%

4.2 Service Offers

POLZUG services include transportation by rail, pre- and on-carriage by truck to and from all cities in Poland, Ukraine, Lithuania, Russia, Belarus, Latvia and Estonia.

Operations are organised under own management on all terminals

Figure 6: Polzug – Rail connections

➢ Poland
Posen, Danzig, Gleiwitz, Kattowitz, Lodz, Pruszkow, Warschau, Breslau

➢ Ukraine
Kiew

➢ Lithuania
Sestokai

1. Operations from European gauge to CIS-gauge

2. Clearance at the customs offices through customs agencies

3. Container storage

4. If necessary, container repair

4.3 Execution of orders and information flow (Export towards Eastern Europe)

The customer, for example a forwarder (Fig. 2), announces his order by telephone, telex or telefax to POLZUG.

1. This order is registered in the POLZUG EDP-system (Oracle Database). The following information are added:

   ➢ Container data
   Number, kind, seize, etc.

   ➢ Cargo
   Kind of cargo (hazardous goods, temperature controlled cargo, etc.)

3. Order data from point 2 are given to HABIS for the transport registration and transport order.

   ➢ Transport registration
   Number of wagons, destination

   ➢ Transport order
   Containers are registered in the transport order separately with the kind of goods, container data (e.g. seize), specialities, destination, receiving station, recipient, etc.

4. Based on these data, a locomotive is ordered from DB Cargo. POLZUG, as customer of DB Cargo, provides its own wagons, and, therefore, only the traction is purchased from outside.

5. Data from points 3 and 4 are given simultaneously via HABIS to DB Cargo and to the Customs Authority. DB Cargo executes the transport orders.

6. After the customs clearance the containers are ready to leave Hamburg. This information is given to the terminal operator via HABIS. At the terminal the containers are loaded.

7. As soon as the loading confirmation is received at HABIS, the bill of lading is printed.

8. All order documents (bill of lading, invoice, etc.), are sent to DB Cargo. These documents accompany the train to the recipient.

9. Cargo tracing information are registered in the POLZUG EDP statistics system and given to clients on demand.

5 Management Information Systems in Rail Transport in Europe

In the preceding chapters we have described the MIS system HABIS of the Port of Hamburg, the different systems and developments of DB AG and the system used by a commercial operator, POLZUG. These explanations are by no means conclusive, rather, the serve as examples for MIS systems in use in rail transport.

The HABIS system is very advanced and comprehensive. Its main characteristics are its open architecture, its multi-user abilities, and its inter-company compatibility. It was developed first and foremost for the users and operators of the Hamburg Port Railway system, in order to increase and maintain the competitive position of the Port of Hamburg. As it was the most advanced system at the time of its development, it set standards that later systems had to meet. Just by its sole existence, it forced and furthered the development of similar systems in other sectors of the road and rail transport industries. The HABIS system handles per day about 145 trains with 4,500 wagons, including 2,000 TEU. It covers a rail network with 600 km of tracks, connecting to approximately 1,000 terminals and loading places in the port. Per year, about 25 million tonnes of cargo are carried, including 720,000 TEU that are transported nearly exclusively by block or scheduled trains to over 20 national and international destinations.

The MIS and cargo tracking systems of the DB AG are designed to meet the requirements of a major rail transport operator, now the largest in Europe. They are of varying levels of sophistication, were often designed for special applications and are only presently brought together into an integrated system. Generally speaking, they are systems for high volume movements to and from a multitude of origins and destinations.

The POLZUG EDP-based cargo tracking and transport information system is firmly based on and embedded in the DAKOSY and HABIS systems. Not only do they interlink for data exchange, but, more importantly, some salient features that a full-scale container tracking and information system must possess are not present in the POLZUG system as these modules are already realised in the DAKOSY and HABIS systems and therefore available to POLZUG. At present, the system handles about 40,000 TEU per year, but has a much higher capacity.

The described EDP-based MIS systems were mainly designed for high volume transports with very strict information requirements of its clients in a very competitive environment. Due to their large scale operational requirements, these systems cannot serve as examples for systems that might be applicable for present day rail freight operations in the Caucasus and in Central Asia.

Discussions with rail freight operators that carry or handle smaller volumes than the DB AG and the Hamburg Port Railway System revealed that they do the dispositioning and tracking of wagon and containers on a more manual basis with the aid of standard EDP programmes and communicate via e-mail or the internet. POLZUG, for instance, has handled until recently up to 35,000 TEU p.a. in such a manner.

Annex 4 - 2

Description of Database

The Program Silk Road Express TEST is designed as a Database for transported containers and gives the possibility of fast input and output of information in/out of the Database.

For facilitation of the work with Program all files, except of work file "All forms", are hidden.

The Program gives the possibility to insert information about the transportation as following:

- POLZUG Position
- Arrival to Port
- Name of Port
- Number of Pilot Train
- Number of platform
- Number and container type (there is possibility to point the tons on containers)
- State of destination
- Point of destination
- Border crossing date (Gardabani-Azeri, Sadakhlo-Armenia)
- Arrival to the point of destination

On the basis of inserted information there is possibility to print three types of reports of Transportation data:

1. Form includes

- POLZUG Position
- Arrival to Port
- Name of Port
- Container number and type

2. Form includes:

- Pilot train number
- Platform number
- Number of container on the platform

3. Form includes:

- POLZUG Position
- Pilot train number
- Platform number and Number of container on the platform
- State of destination
- Point of destination
- Border crossing date
- Arrival to the point of destination

Finding of information about the Transportation is possible on the basis of two main data:

- POLZUG Position
- Pilot train number

If this information is not available, there is possibility to find the information by using of Scroll Bar.

Annex 5– 1
Marketing Activities

Annex 5 - 1

Potential Clients

To Company ...

Hamburg April, 1999

Silk Road Express

Gentlemen,

we are pleased to announce that our existing combined container transport service is being extended with immediate effect to **Georgia**, **Azerbaijan** and **Armenia**.

In practice this means that we have established a route connecting our present service to the Ukraine via the Black Sea to Poti. From there onward transport to the three countries mentioned can be arranged.

It is also possible to make use of our service beyond Poti. Contracts with the local railway companies and hauliers enable us to offer rail transport from Poti to Baku/Azerbaijan and Yerewan/Armenia. Onward transport by road can be arranged from these terminals.

As in the past, *POLZUG* Hamburg remains your only necessary contact regarding all legs of the transport operation.

Transit from Poti to Baku or Yerewan takes 5 days and from Germany to Poti approximately 15 days.

Door deliveries can be carried out after having made arrangements with the receivers or their customs agents.

We have enclosed the appropriate price list in US$ although it is possible to pay in DM.

As you may know, we have had our own *POLZUG* Representative in Kiev since August 1998. Our aim is to set up operations under our own name in the Caucasus region in the foreseeable future. Our interests are already being taken care of by *POLZUG* personal in this area.

In order to arrange your container transport we require the following documents:

- your written instructions
- commercial invoice, legible copy or original
- bill of lading with seal numbers in the case of containers in transit from overseas (please inform us if the seal numbers have been changed during any preceding leg of transport)

- Veterinary certificate, original
- Phytosanitary certificate, original

We would be pleased to accept your bookings for our new service and look forward to your inquiries with interest.

Yours faithfully
POLZUG Polen-Hamburg Transport GmbH

W. Schulze-Freyberg
Managing Director

ppa. M. Schmidt

Summary of possible Customers of Silk Road Express met at the Polzug stand at the Fair Caspian Oil and Gas Exhibition and Conference at Baku 1st -4th June, 1999.

Azerbaijan

Anadolu-C
Artel
ASA
Azertans
BAX Global
Bestcomp Gaoup
ETA
Exkon
Gabeg
Geologistics
Handico
Interdean
Kürvers piping
Londongate Azerbaijan
Murphy
Pentagon Freight Services PLC

Germany

Kürvers piping

England

NYK Line

Italy

Eni

Potential Customers addressed by the project

Company	Branch
ASECO Agentur für Seefracht- und Container Dienste GmbH Hamburg	Germany
Reinhold Bange GmbH, Shipping Agent	Germany
B-A-T GmbH, Cigarettes	Germany
"Heinrich Kröger" Containertransport & Logistics GmbH	Germany
Canada Maritime Limited	Germany
CMA - CGM (Deutschland) GmbH, Shipping Agency	Germany
Conlog GmbH + Co., Container Logistics	Germany
Evergreen Deutschland GmbH	Germany
Eimskip Deutschland GmbH	Germany
DSR Senator Lines	Germany
ETL European, Transport & Logistics GmbH	Germany
Hoyer GmbH, Freight Forwarder	Germany
Hyundai Merchant Marine (Europe) GmbH	Germany
Kühne + Nagel (AG+Co.)	Germany
Mega Freight Aussenhandels-, Speditions-, Schiffahrtskontor GmbH	Germany
FR. Meyer's Sohn GmbH + Co.	Germany
Mitsui O.S.K. Lines	Germany
N.Y.K. Linie (Deutschland) GmbH	Germany
Oscar Ott, Amsinck+Hell Nachf. (GmbH & Co.)	Germany
P&O Nedlloyd Limited, Branch Germany	Germany
Sea Land Service Inc.	Germany
Seabridge Transport GmbH	Germany
TCU Transcontainer Universal GmbH	Germany
D A L Teco Trans Europe	Germany
Teconja Shipping GmbH	Germany
Transcon - Schultz Speditions Gesellschaft mbH (Forwarder)	Germany
Ultra Schiffahrt GmbH	Germany
Yang Ming Shipping Europe GmbH	Germany
Hansa Cargo Transport GmbH	Germany
Hanjin Shipping Company	Germany
K.E. Jensen KG	Germany
Danzas GmbH, International Transports	Germany
Transglobe	Germany
Ernst Glässel GmbH	Germany
ECS Eurocargo Spedition GmbH	Germany
SKS Südkraft Spedition GmbH	Germany

Company	Branch
C.C.T. GmbH	Germany
Emil Ipsen (GmbH & Co.)	Germany
Menzell & Co.	Germany
VOTG Tanktainer GmbH	Germany
Transport Service, International Freight Forwarder	Germany
KOWACO	Germany
Detjen Schiffahrtsagentur GmbH & Co.	Germany
CONTSHIP Containerlines Ltd.	Germany
Cargotainer GmbH	Germany
EMONS Impex Spedition GmbH, International Transports	Germany
CHO YANG Shipping Co. Ltd.	Germany
Balkan & Black Sea Shipping Co.Ltd	Germany
Bombach Ralf International Freight Forwarder	Germany
TRANS - ATLANTIC Japan	Germany
VITESSE Spedition GmbH	Germany
OOCL (Deutschland) GmbH	Germany
BKB Globe International Freight Forwarder Ltd.	Germany
Militzer & Münch	Germany
Mitsui & Co.	Germany
Stute Verkehrs - GmbH	Germany
Wroclawskie Przedsiebiorstwo	Poland
Aneks - Przedsiebiorstwo	Poland
Kesz Sp. z o. o.	Poland
Ralex Sp.z.o.o.	Poland
Stalexport S.A.	Poland
Vermont	Poland
OPUS Sp z o.o.	Poland
NOWEX S.A.	Poland
HOCHLAND Polska Sp. z.o.o.	Poland
P.P.H. Szuba Zbigniew	Poland
Wytwornia Wyrobow Tytoniowych S.A.	Poland
DAWTONA Zaklad Przetworstwa	Poland
Jucca - Centrum Ogrodnicze	Poland
AMERITEX Sp. z.o.o.	Poland
SAGITTA	Poland
INTERMAX	Poland
OVITA Neutricia Sp. z o.o.	Poland

Annex 5 - 2

Local Market Analysis - Interview of Local Firms

Table of Contents

1 - Introduction

1.1 - Objectives of the Local Market Analysis

The development of the INTERMODAL SERVICE project has to be based on a sound evaluation of the local markets.

It was decided to carry out an in-depth market analysis in order to better appraise the image of transport and logistics in the mind of Traceca states businessmen. When it comes to develop international trade, to select business partners, to make a choice on selling conditions and therefore on transport systems, figures and statistics do not reflect all sides of the problem. We have to analyse what is in the customers' mind.

For imports, some traders will shift from CIF conditions to FOB when they realise that they can better control their supply chain by managing their own transport operations. On the other hand, some exports are already made on an FOB basis. In both cases transport operations will be managed by local business people even though this trend is not yet reflected in the available trade figures at present.

Product – or service – design will have to fit needs that are spontaneously expressed by future local customers and not only the logical needs that we, as professional transport operators and experts, think to have clearly identified and discussed with European exporters.

Advertising and promotion campaign will have to take into account the reaction of local business people, their preferences, their views on transport matters and, in the end, the image of the Traceca line.

The first objective of this analysis is therefore to better adapt the INTERMODAL SERVICE offer to the expectancies of the future customers.

The second objective is to provide a consistent set of observations and conclusions that will be used for the promotion and advertising campaign. Topics that will have to be addressed have been identified that might have been neglected without the local analysis.

Third, we bear in mind that training courses must be closely adapted to the needs of the future local operators of the INTERMODAL SERVICE (Railways marketing people, traffic managers, terminal operators). We have repeatedly observed that, in the CIS, professional transport operators tend to force their organisation and thinking on the customer; and these old habits are hard to die, but CIS transport operators will have change their approach in order to satisfy their customers.

The analysis is providing an overview of their customers' thinking and will make them realise:

- that there is still a gap between what the customers want and what the local transport operators are ready to offer, or else,
- that some outdated reactions are still alive in the customers' minds and that they will have to take the time and explain to them what the situation is really like as compared to the current thinking (such as the "dangers" of crossing the Caucasus).

As a result it can be expected that the transport operators will build up a more effective relationship with their customers taking into account the results of the analysis.

1.2 Methodology:

A combined team of European and local experts gathered information on importers, exporters, freight forwarders, insurers, etc. The addresses were obtained mostly from Embassies and from available lists of businesses, including "Yellow pages" or similar kinds of directories. Hundreds of names and addresses were collected in the field of foreign trade; if need be, this alone would show how foreign trade is developing in the area.

Based upon these data, a selection of more than 350 local businesses that might be of interest in container operations has been designed and these companies have been approached.

Local habits of secrecy made it difficult to meet all the selected persons and in the end we were able to collect viable information from 174 companies covering all Traceca states (except Tajikistan for obvious reasons and Turkmenistan, as this latter country has a comparatively small traffic).

(table 1)

Geographical zone	Countries	Contacts	Interviews	Percentage
CAUCASUS	Armenia	60	43	72%
	Azerbaijan	64	12	19%
	Georgia	62	42	68%
CENTRAL ASIA	Kazakstan	65	39	60%
	Uzbekistan	119	36	30%
	Kirghizstan	2	2	n.s
Total		372	174	47%

1.3 General overview of the results:

Transport operations tend to become a major problem for local business in a free market economy when competition is growing. This idea starts to be accepted in the area though business people have relied so far on their own foreign partners to take care of transport problems.

1.3.1 Lack of proper transport "culture"

Basic knowledge of transport operations and operators are not properly mastered by most business people. They do not know what the freight forwarder is really doing; needless to say they have little idea of the difference between a shipping agent, a customs broker, a carrier, etc. As most imports have been concluded on a CIF basis, they lack the first hand experience that would show them how the profession is actually organised.

1.3.2 Lack of reliable figures

Information gathered on transport flows (tonnage, number of operations, quantities, etc.) seems to be definitely unreliable; data are not consistent and no reliable conclusion can be drawn from these figures.

One of the problems is the "cult of secrecy" that is pervasive in the local business culture.

Another one comes from the states themselves: even trade figures obtained through information gathering programmes sponsored – and financed – by the international community, including the European Union, tend to be considered as "state secrets" and are not made available to market researchers.
In one instance we were requested an extravagant amount of money from a Ministry in order to get the customs statistics; in another instance we got a nice letter from the office of the government "explaining" why the results of a European sponsored programme on customs figures could not be made available to us.

We must point out, however, that printed statistics were delivered to us by the Kyrghiz Customs upon request and for very little money just covering printing charges.

1.3.3 Image of Transport Modes and Operations

A dissatisfaction was expressed regarding Railways; this was mainly for poor customer service, long delays, old equipment, etc. This is not in accordance with the opinion of western transport operators who tend to rate the railways better than the local people, even if some of the obvious critics cannot be challenged.

Road transport image seems to be better; in fact this concerns only the North and South (Iran) routes and specific traffics.

Advantages of Container transport are not properly understood. Besides, customers are only familiar with "last voyage" containers due to the poor management of container fleets at present (in fact resulting from the unbalance of container traffic) ; However, there are great expectations regarding this mode, particularly for traffic to and from western Europe.

Block trains of containers become a fashionable idea as customers expect from these trains more safety, shorter delays, lower prices; however they insist on effective local ("door to door") deliveries which is very often non-existing or poorly managed by the railways or terminal operators.

1.3.4 Transport related issues

Customs formalities and controls are resented and considered a loss of time and money. Faster (and cheaper) transit procedures would be welcome; some concern has been expressed regarding specific transit problems such as transit taxes which are unpredictable or at unbearable level.

Insurance matters are neglected and do not seem to rank high in business concerns; first, because this is still under the responsibility of the supplier (as most import contracts are CIF) and second because few claims are settled properly and importers tend to consider that damages are part of their normal risk (as a result they tend to resell imported goods at a higher price in order to cover all unexpected losses).

1.3.5 Image of the Traceca Line

Traceca programmes are very well know all over the area.

This is particularly true in the Caucasus and all Traceca programmes have undoubtedly helped to develop foreign trade; this fact is always stressed by people in interviews and we can expect that, provided they are competitive with road offers, INTERMODAL SERVICES will be widely used in this area.

In Central Asia, the Traceca line suffers from the poor image of the Caucasus still considered as an unsafe region. This reaction is not based on first hand experience but reflects what tends to be a "politically correct" opinion; in Kazakstan for instance, one of the countries that keep closer ties with Russia, this opinion remains widely spread. On the other hand, government and business circles insist that central Asia is a natural transit zone and that all routes, including of course the Traceca line, should participate in the efficient development of transit operations between East and West.

2 Country by Country Analysis

Interviews are analysed on a country by country basis. However, the same chapters and tables have been used so that comparisons can be made and general conclusions can be drawn.

A general conclusion on the main observations that can be made will appear on chapter 3 hereunder.

2.1 Armenia

Interviews satisfactorily conducted: **43**

A – CONFIDENTIALITY: Armenians answered freely our questions; only 2 interviewees out of 43 decided to keep some pieces of information confidential. This point can be stressed as we have encountered more difficulties in all other states.

(table AR1)

No answer on the following topics considered "confidential"	*Number*	*Percentage*
Quantities shipped or received	1	2%
Name of western partners	1	2%
Total interviews	43	100%

B – FREIGHT ROUTES

COMPETING ROUTES

No answer from Armenians importers or exporters.

COUNTRIES TO BE BY-PASSED
(table AR3)

Country	*Reason expressed*	*Number*	*per country*
	No answer to this question	14	14
	No reservations expressed	17	17
RUSSIA	unsafe	2	7
	expensive and long delays	1	
	racketeers along the roads	1	
	transit and customs procedures	1	
	unstable political situation	1	
GEORGIA	no specific reason mentioned	1	2
	racketeers along the roads	1	
IRAN	too expensive and long delays	1	2
	transit and customs procedures	1	
TURKEY	no specific reason mentioned	1	1

Armenia (2)

TRACECA LINE

(table AR4)

Opinions expressed	*Number*	*Percentage*
We know the TRACECA line	16	37%
We use the TRACECA line	11	26%
No answer	16	37%
Total	43	100%

Few comments on this point; one interviewee however ventured this explanation: "I use the line as there are racketeers on the road through Georgia".

C - TRANSPORT SYSTEM

RATIO OF SATISFACTION / DISSATISFACTION (on 43 interviewees)

(table AR5)

	USE	*USE*	*SATISFIED*	*SATISFIED*
	Number	*percentage*	*Number*	*Percentage*
Railways	34	79%	8	24%
Road transport	15	35%	15	100%
Containers	29	67%	n.a.	

Interviewees expressed very little satisfaction with the present system; any figure would not reflect their spontaneous reactions which surprisingly negative.

MAIN COMPLAINTS ON THE PRESENT TRANSPORT SYSTEM

(table AR6)

Critics or complaints	*Number*	*Percentage*
No criticism	37	77%
Too expensive	4	8%
Long delays	2	
Operations do not fit the needs of customers	1	
Losses and damages	1	
Outdated transport equipment	1	
Georgian transit is too expensive	1	
Railways cannot carry heavy goods (?)	1	
Total opinions expressed	48	100%

Armenia (3)

USE OF CONTAINERS

(table AR7)

At present			*In the near future*		
Use containers	2	5%	Will use containers	32	74%
Do not use containers	13	30%	Will not use them	5	12%
No answer	28	65%	No answer	6	14%
Total	43	100%	Total	39	100%

REASONS FOR USING / NOT USING CONTAINERS

(table AR8)

	Number	*Number*
No reason expressed	15	15
WILL USE IT		?
WILL NOT USE IT		16
Products are not compatible with the use of containers	9	
Long delays	3	
Too expensive	2	
Do not need it	1	
Do not use maritime transport	1	

Tables AR7 and AR8 are contradictory; a majority will use containers in the future but we could only collect criticisms. This probably reflects the Armenian mind ! At least, it is an indication for the future promotion campaign.

D – FREIGHT FORWARDING

INFORMATION PROVIDED BY FREIGHT FORWARDERS

(table AR9)

	Number	*Percentage*
Information is correct	21	49%
Information is not adequate	7	7%
No answer to this question	15	15%
TOTAL	43	100%

Armenia (4)

FREIGHT FORWARDERS

(table AR10)

	Number	*Percentage*
Not willing to mention a specific freight forwarder	27	52%
APAVEN	5	10%
MURPHY	3	6%
CMN	3	6%
NOMAD EXPRESS	2	*Less than 5%*
ARMTREKS	2	
LOGIMIX	2	
ROAD AIR	1	
PANALPINA	1	
KALTRADE	1	
SEABORNE	1	
DHL	1	
BARVIL	1	
KORTEC'S	1	
ARARAT REGIONAL CUSTOMS EXPED.	1	
Names mentioned	52	100%

E- FOREIGN TRADE

EXPECTED TREND IN FOREIGN TRADE

(table AR11)

	Number	*Percentage*
Business will pick up	31	72%
No opinion	6	14%
Business will stabilise	3	7%
Business will slow down	3	7%
Total	43	100%

Armenia (5)

F – SUGGESTIONS

HOW TO IMPROVE ECONOMIC ENVIRONMENT AND FACILITATE BUSINESS

(table AR12)

	Number	*Percentage*
No idea	25	52%
Support the development of railways	5	10%
Lower costs	4	8%
Improve delays	4	8%
Stabilise the economy	2	*Less than 5%*
Improve customs procedures	2	
Design a fair tax system	2	
Improve safety	2	
Suppress Turkish embargo	1	
Develop more friendly relations with business partners	1	
Total	48	100%

HOW TO IMPROVE TRANSPORT SYSTEMS IN YOUR ZONE

(table AR13)

	Number	*Percentage*
No idea	22	43%
Curb delays	7	14%
Open and maintain roads and railways in operation	7	14%
Lower tariffs	6	12%
Improve safety	5	10%
Improve customs procedures	1	*Less than 5%*
Improve banking conditions (?)	1	
Provide more information	1	
Improve services	1	
Total opinions expressed	51	100%

2.1 Azerbaijan

Interviews satisfactorily conducted: 12

Azerbaijan seems to be suffering from the "secrecy syndrome"; out of 64 firms contacted, only 12 valuable interviews could be conducted. This is the Traceca record so far, set at an unbeatable 19% of response only from a selected panel of business firms.

A – CONFIDENTIALITY:.

(table AZ1)

No answer on the following topics considered "confidential"	*Number*	*Percentage*
Names of western partners	7	47%
Quantities traded	5	33%
Who is taking care of transport operations ?	1	7%
What is your own traffic forecast ?	1	7%
Did you suffer from losses or damages ?	1	7%
Total answers	15	100%

B – FREIGHT ROUTES

COMPETING ROUTES

No information has been collected on this subject considered more or less "confidential".

COUNTRIES TO BE BY-PASSED

(table AZ3)

Country	*Reason expressed*	*Number*	*per country*
RUSSIA	Unsafe	6	
IRAN	Long delays	3	

Azerbaijan (2)

TRACECA LINE

(table AZ4)

Opinions expressed	*Number*	*Percentage*
We know the TRACECA line	8	67%
We use the TRACECA line	3	25%
No answer	1	8%
Total	12	100%

C - TRANSPORT SYSTEM

RATIO OF SATISFACTION / DISSATISFACTION (on 12 interviewees)

(table AZ5)

	USE	*USE*	*SATISFIED*	*SATISFIED*
	Number	*percentage*	*Number*	*Percentage*
Railways	5	42%	2	40%
Road transport	10	83%	7	70%
Containers	7	58%	n.a.	

MAIN COMPLAINTS ON THE PRESENT TRANSPORT SYSTEM

(table AZ6)

Critics or complaints	*Number*	*Percentage*
Customs procedures	1	
Total opinions expressed	1	

USE OF CONTAINERS

(table AZ7)

At present			*In the near future*		
Use containers	1	8%	Will use containers	8	67%
Do not use containers	5	42%	Will not use them	0	0%
No answer	6	50%	No answer	4	33%
Total	12	100%	Total	12	100%

Azerbaijan (3)

REASONS FOR USING / NOT USING CONTAINERS

(table AZ8)

	Number	
No reason expressed	6	
WILL USE IT		
WILL NOT USE IT		
Products are not compatible with the use of containers	2	
Long delays	2	
Too little traffic	1	

D – FREIGHT FORWARDING

INFORMATION PROVIDED BY FREIGHT FORWARDERS

(table AZ9)

	Number	*Percentage*
Information is correct	8	67%
Information is not adequate	0	0%
No answer to this question	4	33%
TOTAL	12	100%

Azerbaijan (4)

FREIGHT FORWARDERS

(table AZ10)

	Number	*Percentage*
Not willing to mention a specific freight forwarder	1	n.c.
M&M	1	
CIP	1	
BAKICIOGLU	1	
INTERTRANS	1	
BARVIL	1	
PANALPINA	1	
TRANSGEORGIA	1	
PENTAGON	1	
ERENLER	1	
TARU BAR	1	
SISAMTRANS	1	
Names mentioned	12	100%

E- FOREIGN TRADE

EXPECTED TREND IN FOREIGN TRADE

(table AZ11)

	Number	*Percentage*
Business will pick up	8	67%
No opinion	1	8%
Business will stabilise	3	25%
Business will slow down	0	
Total	12	100%

Azerbaijan (5)

F – SUGGESTIONS

HOW TO IMPROVE ECONOMIC ENVIRONMENT AND FACILITATE BUSINESS

(table AZ12)

	Number	*Percentage*
No idea	6	50%
Lower costs	1	
Provide a good service	1	
Provide door to door service	1	
Improve the image of TRACECA	1	
Improve customs procedures	1	
Lower taxes	1	
Total	12	100%

HOW TO IMPROVE TRANSPORT SYSTEMS IN YOUR ZONE

(table AZ13)

	Number	*Percentage*
No idea	4	27%
Set up a better payment system	2	13%
Speed up transport systems	2	13%
Lower tariffs	2	13%
Lower "penalties"	2	13%
Respect delivery dates and delays	1	
Lower container tariffs	1	
Improve service standards in the west	1	
Total opinions expressed	15	100%

2.2 Georgia

Interviews satisfactorily conducted: **42**

A – CONFIDENTIALITY: issues raised when filling the questionnaires together with the interviewees and marketing experts.

(table G1)

No answer on the following topics considered "confidential"	*Number*	*Percentage*
Name of western partner	4	10%
Quantities shipped or received	3	7%
Partner country	3	7%
TOTAL interviews	42	100%

B – FREIGHT ROUTES

(table G2)

Routes	*Number*	*Percentage*
No opinion on transport routes	8	19%
Do not use the North route	13	31%
Use the North route	2	5%
No preference	7	17%
Try to by-pass Russia and Iran	12	29%
TOTAL	42	100%

COUNTRIES TO BE BY-PASSED

(table G3)

Country	*Reason expressed*	*Number*	*per country*
RUSSIA	Transit taxes	1	4
	Delays	1	
	Thefts and losses	1	
	North Caucasus is unsafe	1	
IRAN	Insurance companies do not	1	1
	Cover transfer through Iran		
No answer		37	

Georgia (2)

TRACECA LINE

(table G4)

Opinions expressed	*Number*	*Percentage*
We know little about the TRACECA line	28	82%
We know it well	3	9%
We do not know anything about the TRACECA line	3	9%
Total opinions expressed	34	100%

C - TRANSPORT SYSTEM

RATIO OF SATISFACTION / DISSATISFACTION (on 42 interviewees)
(table G5)

	USE	*USE*	*SATISFIED*	*SATISFIED*
	Number	*percentage*	*Number*	*Percentage*
Railways	10	24%	8	80%
Road transport	31	74%	22	71%
Containers	14	33%		

MAIN COMPLAINTS ON THE PRESENT TRANSPORT SYSTEM
(table G6)

Critics or complaints	*Number*	*Percentage*
No answer to this question	39	
Long delays	2	
Too expensive	1	
Total opinions expressed		100%

USE OF CONTAINERS (table G7)

At present			*In the near future*		
Use containers	13	31%	Will use containers	32	76%
Do not use containers	21	50%	Will not use them	6	14%
No answer	8	19%	No answer	4	10%
Total	42	100%	Total	42	100%

Georgia (3)

REASONS FOR USING / NOT USING CONTAINERS

(table G8)

	Number	*Number*
No reason expressed	7	
WILL USE IT		
WILL NOT USE IT		
No need (low volume – type of products)	14	
Too expensive	6	
Longer delays	1	
Not in operations yet	1	
Not profitable	1	
It will make us lose clients	1	

D – FREIGHT FORWARDING

INFORMATION PROVIDED BY FREIGHT FORWARDERS

(table G9)

	Number	*Percentage*
Information is correct	31	74%
Information is not adequate	9	9%
No answer to this question	2	5%
TOTAL	42	100%

Georgia (4)

FREIGHT FORWARDERS

(table G10)

	Number	*Percentage*
Not willing to mention a specific freight forwarder	19	37%
SEA LAND	4	8%
GEORGIA TRANS EXPEDITIA	4	8%
MEDITERRANEAN SHIPPING Co.	3	6%
BARWILL	3	6%
CAVTREX	3	6%
WILLY BETZ	3	6%
SOVTRASNAVTO	2	
CORNELL GEERTS	2	
M&M	1	
NOMAD EXPRESS	1	
DAVID SARADJICHVILI	1	
KERTAINER LINES	1	
GEORGIAN TRASNPORT GROUP	1	
TRANS SERVICE	1	
GROUPAGE SERVICE	1	
NIPPON EXPRESS	1	
Total	51	100%

E- FOREIGN TRADE

EXPECTED TREND IN FOREIGN TRADE

(table G11)

	Number	*Percentage*
Business will pick up	8	19%
No opinion	32	76%
Business will stabilise	1	2%
Business will slow down	1	2%
Total	42	100%

Georgia (5)

F – SUGGESTIONS

HOW TO IMPROVE ECONOMIC ENVIRONMENT AND FACILITATE BUSINESS

(table G12)

	Number	*Percentage*
No idea		
Improve political and economic stability	21	27%
Improve fiscal system	20	26%
Improve customs procedures and duties	10	13%
Get more financially solvent clients	8	10%
Fight corruption and frauds	7	9%
Get guarantees on deliveries	4	5%
Curb delays	1	
Build up infrastructure	1	
Improve the road system	1	
Improve packaging	1	
Lower transport costs	1	
Reduce the number of control units (?)	1	
Improve customer service quality	1	
Total	77	100%

HOW TO IMPROVE TRANSPORT SYSTEMS IN YOUR ZONE

(table G13)

	Number	*Percentage*
No idea	10	19%
System is under control; no improvement necessary	9	17%
Improve transport reliability	9	17%
Lower prices	9	17%
Shorten delays	9	17%
Improve customs procedures and tariffs	3	6%
Improve safety	1	
Improve local deliveries	1	
Improve Railways services	1	
Make sure railways can be used door to door	1	
Get information on the situation of the goods (tracking systems)	1	
	54	100%

2.3 Kazakhstan

Interviews satisfactorily conducted: **39**

A – CONFIDENTIALITY: issues raised when filling the questionnaires together with the marketing experts. (table K1)

No answer on the following topics considered "confidential"	*Number*	*Percentage*
Quantities shipped or received	3	8%
Tonnage	10	25%
Name of western partners	10	25%
Name of freight forwarder	3	8%
Development of intermodal systems in Central Asia	1	3%
Activity of the interviewee	1	3%
TOTAL interviews	39	100%

B – FREIGHT ROUTES

COMPETING ROUTES (table K2)

Routes	*Number*	*Percentage*
No opinion on transport routes	19	56%
TRACECA does not met their needs	6	28%
TRACECA is dangerous / using this route is a difficult business	4	12%
Use and favour North Route	3	9%
No preference	2	6%
TOTAL	34	100%

COUNTRIES TO BE BY-PASSED(table K3)

Country	*Reason expressed*	*Number*	*per country*
RUSSIA	Customs procedures	3	5
	Loss of freight	1	
	No precise reason	1	
IRAN	Customs procedures	3	10
	Loss of freight	2	
	No reason	5	
CAUCASUS	Too dangerous	4	6
	Too slow	2	
BELARUS	Thefts	1	1
No answer		21	21

Kazakhstan (2)

TRACECA LINE
(table K4)

Opinions expressed	*Number*	*Percentage*
We don't know anything about this line	22	44%
No answer – no comment	14	28%
The line is dangerous as it crosses the Caucasus	11	22%
We only know it exists	3	6%
Total opinions expressed	50	100%

C - TRANSPORT SYSTEM

RATIO OF SATISFACTION / DISSATISFACTION (on 39 interviewees)
(table K5)

	USE	*USE*	*SATISFIED*	*SATISFIED*
	Number	*percentage*	*Number*	*Percentage*
Railways	26	67%	11	42%
Road transport	28	72%	20	71%
Containers	27	69%	8	30%

MAIN COMPLAINTS ON THE PRESENT TRANSPORT SYSTEM
(table K6)

Critics or complaints	*Number*	*Percentage*
No answer to this question	14	28%
Long delays	12	24%
Crossing the Caucasus (not safe)	11	22%
Shipments are not properly traced	4	8%
No complaint: "Kazak railways deliver a good service"	4	8%
"Monopoly of the Railways"	3	6%
Infrastructure are inadequate	2	4%
Total opinions expressed	50	100%

USE OF CONTAINERS
(table K7)

At present			*In the near future*		
Use containers	0	0%	Will use containers	23	59%
Do not use containers	9	23%	Will not use them	4	10%
No answer	30	77%	No answer	12	31%
Total	39	100%	Total	39	100%

Kazakhstan (3)

REASONS FOR USING / NOT USING CONTAINERS

(table K8)

	Number	*Number*
No reason expressed	19	19
WILL USE IT		
For traffic with Europe	12	18
For traffic with Turkey	3	
For traffic with the USA	1	
It is faster and more efficient	1	
It is "confidential"	1	
WILL NOT USE IT		
Too expensive	3	8
Transit time is too long	1	
Not enough traffic	1	
Products are not compatible with the use of containers	1	
Containers cannot be shipped through the railways as customs procedures are too complicated and there are delays at the border	1	
We use road transport only	1	

It must be noted that, when beginning interviews, interviewees are asked whether they know and use containers; then the answer is generally "yes": we have 28 "yes" and 11 "no".

When questions become more specific about transport modes, interviewees tend to be more shy (?) and then no one has suddenly a good knowledge of container traffic.

D – FREIGHT FORWARDING

INFORMATION PROVIDED BY FREIGHT FORWARDERS

(table K9)

	Number	*Percentage*
Information is correct	20	52%
Information is not adequate	10	26%
No answer to this question	9	22%
TOTAL	39	100%

Kazakhstan (4)

FREIGHT FORWARDERS

(table K10)

	Number	*Percentage*
Not willing to mention a specific freight forwarder	21	37%
RAILWAYS	5	9%
M & M	3	5%
No need of FF; they take care of their own operations	3	5%
KAZINTERFRACHT	2	*less than 5%*
KTJ	2	
SEA LAND	2	
APARAL	1	
AYA J.	1	
BROCKMULLER	1	
DANZAS	1	
DOLPHIN	1	
GLOBALINK	1	
ISKOM	1	
KODNET MARKETING	1	
KUHNE & NAGEL	1	
MATRIX	1	
RUBICON	1	
RUSSKY CONTAINERS	1	
SBS	1	
SOVMORTRANS	1	
TRANS RAIL	1	
TRANS SERVICE	1	
TRANS SYSTEM	1	
WESOTRA	1	

E- FOREIGN TRADE

EXPECTED TREND IN FOREIGN TRADE

(table K11)

	Number	*Percentage*
Business will pick up	25	64%
No opinion	10	26%
Business will stabilise	3	8%
Business will slow down	1	3%
Total	39	100%

Kazakhstan (5)

F – SUGGESTIONS

HOW TO IMPROVE ECONOMIC ENVIRONMENT AND FACILITATE BUSINESS

(table K12)

	Number	*Percentage*
No idea	32	82%
Improve customs procedures	2	5%
Improve railways service	1	
Curb delays	1	
Lower taxes	1	
Lower prices	1	
Pay higher wages	1	
Total	39	100%

HOW TO IMPROVE TRANSPORT SYSTEMS IN YOUR ZONE

(table K13)

	Number	*Percentage*
No idea	23	53%
Curb delays	5	12%
Have the TRACECA line in operation	4	9%
Improve the tracking of shipments – give information upon request	4	9%
Present system is satisfactory - Nothing is to be changed	2	5%
Lower prices	2	5%
Improve services	1	
Develop infrastructure	1	
Improve railways services	1	
	43	100%

2.4 Uzbekistan

Interviews satisfactorily conducted: **36**

A – CONFIDENTIALITY: issues raised when filling the questionnaires together with the interviewees and marketing experts.

(table U1)

No answer on the following topics considered "confidential"	*Number*	*Percentage*
Name of European Partners	4	11%
Quantities shipped or received	2	5%
Geographical zones	2	5%
Name of freight forwarder	1	
Total interviews	36	100%

B – FREIGHT ROUTES

COMPETING ROUTES: no answer from Uzbek interviewees

COUNTRIES TO BE BY-PASSED:

(table U3)

Country	*Reasons expressed*	*Number*	*per country*
RUSSIA	Dangerous	1	1
IRAN	Dangerous	1	1
CAUCASUS	Unstable	4	5
	Dangerous	1	
No restriction/no answer		29	29
TOTAL		36	

Uzbekistan (2)

TRACECA PROGRAMME / TRACECA LINE
(table U4)

Opinions expressed	*Number*	*Percentage*
TRACECA is a useful programme that could improve the local economic situation	12	30%
The TRACECA line will cross an unstable/dangerous region (Caucasus)	7	18%
We lack information on INTERMODAL SERCICES	6	15%
TRACECA programme is not sufficiently developed	6	15%
We hope that INTERMODAL SERVICE will be a concrete programme	3	
INTERMODAL SERVICE will be fine when it works	2	5%
I do not see any difference with the regular line and service	1	
Offers are not satisfactory	1	
Transport operations are managed by the supplier	1	
My business partner is not satisfied with the TRACECA line	1	
	40	100%

C - TRANSPORT SYSTEM

RATIO OF SATISFACTION / DISSATISFACTION (on 36 interviewees)
(table U5)

	USE	*USE*	*SATISFIED*	*SATISFIED*
	Number	*percentage*	*Number*	*Percentage*
Railways	18	37%	18	100%
Road transport	23	47%	9	39%
Containers	11	16%	8	73%

COMMENTS AND COMPLAINTS ON THE PRESENT TRANSPORT SYSTEM

(table U6)

Comments and Complaints	*Number*	*Percentage*
No answer to this question	16	44%
Long delays	3	8%
Thefts in the railways	2	6%
Gods are delivered on time	14	39%
No complaints: service is good	1	3%
Total	36	100%

Uzbekistan (3)

USE OF CONTAINERS
(table U7)

At present			*In the near future*		
Use containers	0	0%	Will use containers	29	81%
Do not use containers	35	97%	Will not use them	7	19%
No answer	1	3%	No answer	0	0%
Total	36	100%	Total	36	100%

REASONS FOR USING / NOT USING CONTAINERS
(table U8)

	Number	*Number*
Do not know – lack of information	5	10
Not decision maker	5	
WILL USE IT		
To be discussed when the contract will be negotiated	1	1
WILL NOT USE IT		
Not enough traffic	9	29
Cost will be higher	8	
Products are not compatible with the use of containers	4	
Not developed enough in Uzbekistan	3	
We have no use for them	2	
There are no trucks for carrying containers (?)	1	
No proposal has ever been received	1	
We ship on FOB basis	1	

It must be noted that, when beginning interviews, interviewees are asked whether they know and use containers; then the answer was "yes" for 8 of them. When questions become more specific about transport modes, interviewees tend to be more shy (?) and then no one has suddenly a good knowledge of container traffic.

D – FREIGHT FORWARDING

INFORMATION PROVIDED BY FREIGHT FORWARDERS
(table U9)

	Number	*Percentage*
Information is correct	21	58%
Information is not adequate	15	42%
No answer to this question	0	0%
TOTAL	36	100%

Uzbekistan (4)

FREIGHT FORWARDERS

(table U10)

	Number	*Percentage*
Not willing to mention a specific freight forwarder	13	29%
UZVNESHTRANS	13	29%
M & M	6	13%
DANZAS	2	*Less than 5%*
AKTALGA	1	
CALENBERG	1	
CENTRAL ASIAN TRASNPORT	1	
IMESK	1	
KUHNE & NAGEL	1	
MAAS	1	
SAYGUL NEIMER	1	
SB TRANS	1	
SHOSH TRANS	1	
UZGEKDOREXPEDITSIA	1	
UZKAN	1	

E- FOREIGN TRADE

EXPECTED TREND IN FOREIGN TRADE

(table U11)

	Number	*Percentage*
No opinion	19	53%
Business will stabilise	9	25%
Business will pick up	7	21%
Business will slow down	1	3%
Total	36	100%

Uzbekistan (5)

F – SUGGESTIONS

HOW TO IMPROVE ECONOMIC ENVIRONMENT AND FACILITATE BUSINESS

(table U12)

	Number	*Percentage*
Develop reliable transport system	23	34%
Currency convertibility	17	25%
Curb delays	13	19%
Improve safety in transport	3	4%
Suppress the monopoly on the cotton market	3	4%
Develop transport services	2	
Stability on the country	2	
State guarantee	1	
Lower tariffs	1	
Improve contract conditions	1	
No answer	1	
Total number of suggestions	67	100%

HOW TO IMPROVE TRANSPORT SYSTEMS IN YOUR ZONE

(table U13)

	Number	*Percentage*
No idea	17	47%
Make sure goods will be delivered on time	12	33%
Curb delays	4	11%
Improve service	1	3%
Lower prices	1	3%
Match domestic service quality with international transport service	1	3%
total	36	100%

3 Conclusion

Interviews have produced about 450 pages of detailed information on local businesses and their views and habits on transport matters. We have tried to extract the most important pieces of information in order to produce the tables shown in the report. However, some valuable details can be gathered from individual interviews.

As a rule, the local market analysis has confirmed or demonstrated some bare facts regarding the traffic of goods that could be containerised:

- Road transport is in wider use in the Caucasus while rail fares better in Central Asia. As a result we expect competition for INTERMODAL SERVICES to be greater in the Caucasus.
- Interviewees express a great satisfaction for rail services, though they voice some criticism when asked about details; on one hand this reflects the old Soviet habit of relying on the railways for all long distance shipments; on the other hand, it shows that the railways could capitalise on their good image and keep a big part of the freight business if they modernise on time and improve customers relations;
- Presently container traffic is just beginning and a majority of high value goods that could be containerised still are shipped by truck or regular wagons; however, a vast majority of firms interviewed express their willingness to shift to multi-modal transport; service offers will be met with great expectancy provided the quality of service is guaranteed (this has been repeatedly mentioned in interviews)
- Generally, business trend is considered favourable; in the Caucasus the degree of uncertainty is higher of course and Armenians as well as Georgians tend to have "no opinion" on the subject; business people in Azerbaijan as well as in Central Asia think differently and there is a clear majority of "optimists" versus "pessimists" in this area.

These facts are shown in the graphs appearing in the next pages.

A closer look at interviews shows that transport is still an unknown world for the vast majority of local customers. The local marketing strategy of the INTERMODAL SERVICE operators will have to take this into account and deliver clear, practical, concrete messages.

A close relation with customers needs to be established by local sales forces; this in turn means that sales forces must be properly trained on all aspects of transport and logistics as they will be confronted to all sorts of questions – and all tricks from the competition !

Appendix 1: Graphs

Modes of transport used

Index of satisfaction per mode

Present usage of containers

Future usage of containers

Business forecasts of interviewees

Appendix 2: Lists of Firms Interviewed

Armenia

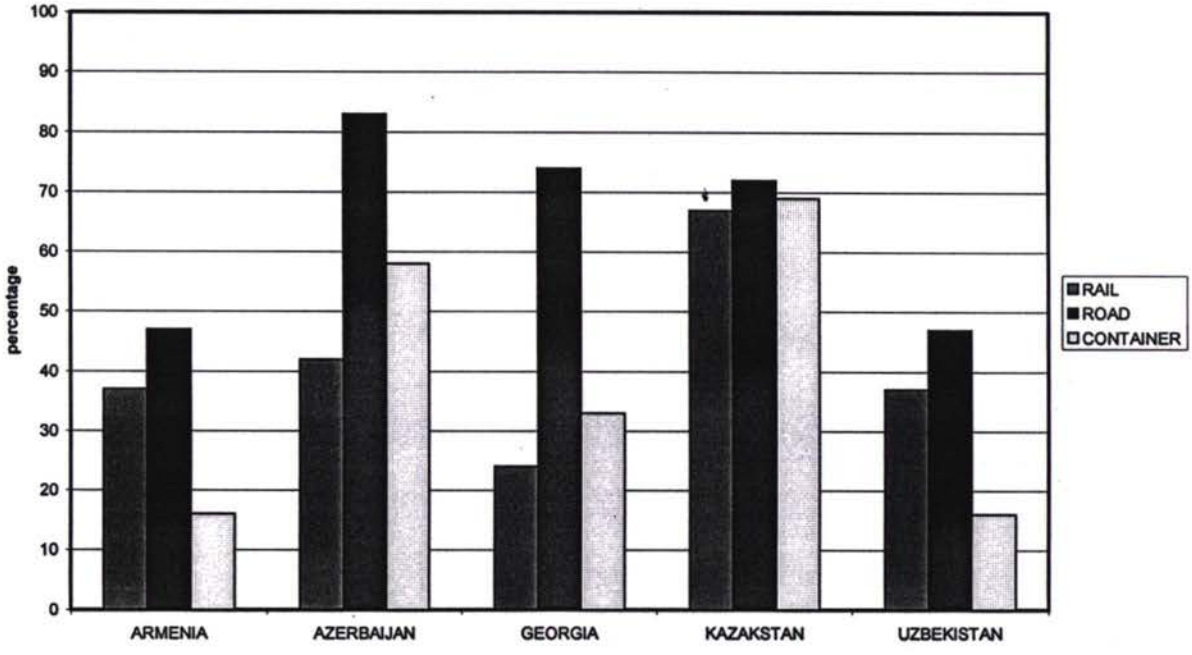
Azerbaijan

Georgia

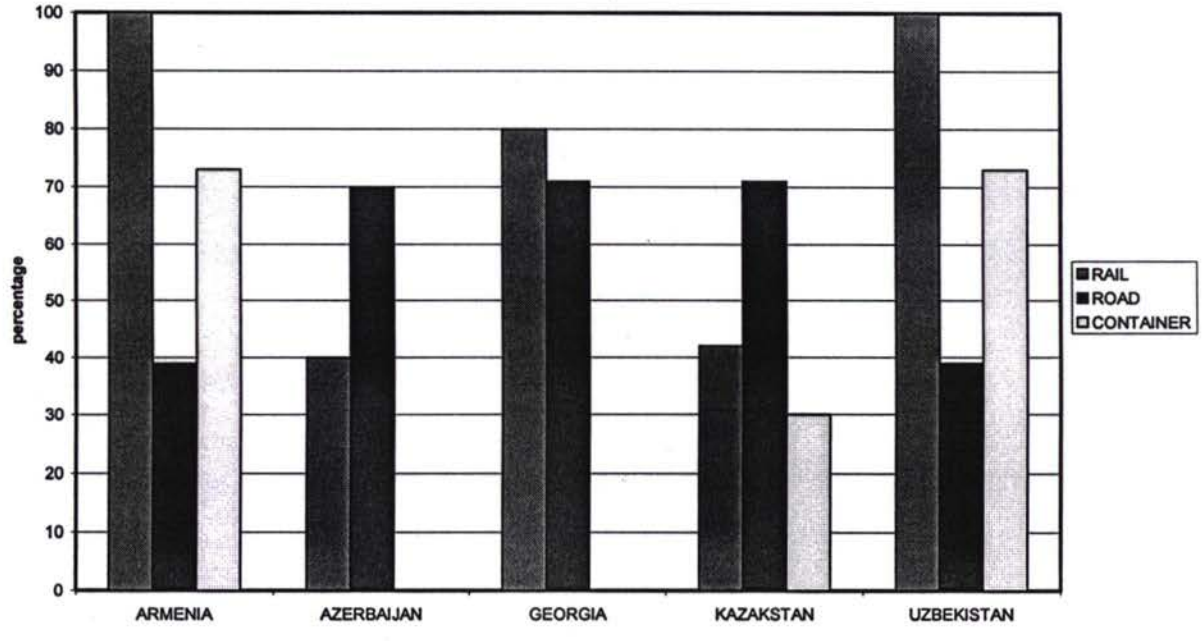
Kazakhstan

Uzbekistan

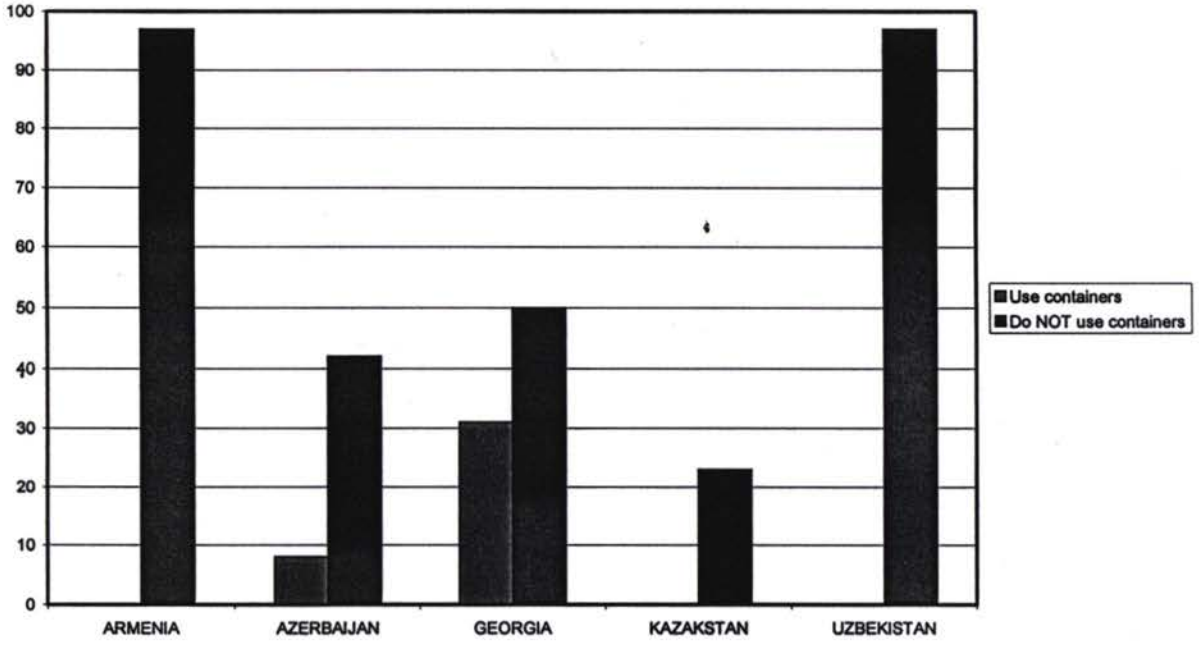
Modes of transport used



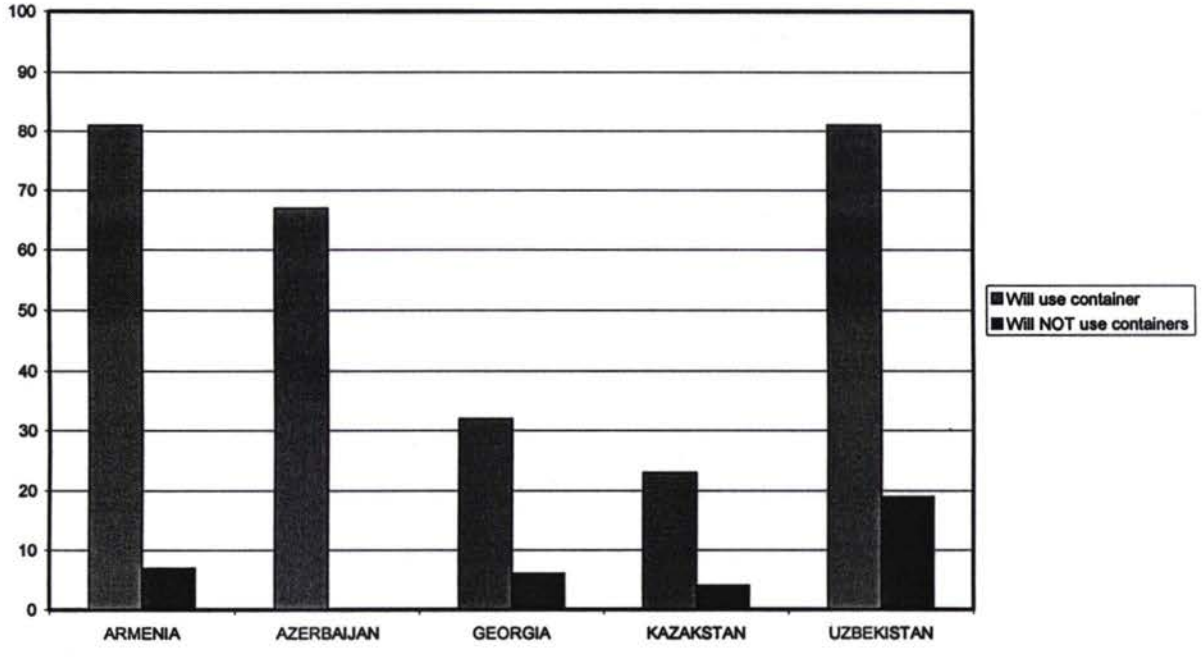
Index of satisfaction per mode

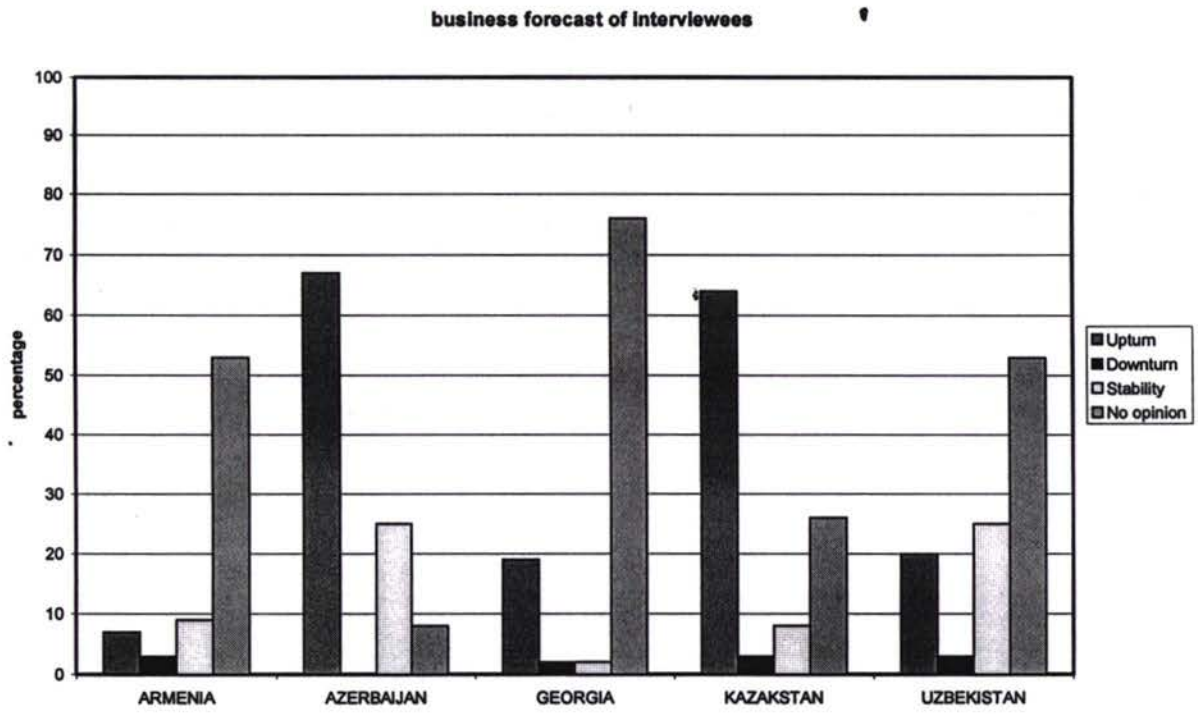


present container usage



future container usage




business forecast of interviewees
percentage
100
90
80
70
60
50
40
30
20
10
0
ARMENIA
AZERBAIJAN
GEORGIA
KAZAKSTAN
UZBEKISTAN
Uptum
Downturn
Stability
No opinion

FIRMS INTERVIEWED	
ARMENIA	
CLOTHING/TEXTILES	
	METAK
	GARUN
	BUSINESS CONTACT
FODDSTUFF	
	UNISERVICE
	TEIZERK
	SARIKO
	OMEGA
	MALEVOS
	KALTRADE
	BUSINESS CONTACT
	YEREVAN BRANDY Cie
	ABOVYAN BREWERY
COSMETICS	
	OMEGA
	PARTNER
	MALEVOS
	JERMUK
	BUSINESS CONTACT
PHARMACEUTICALS	
	FARMATEK
	BAZUM
	ARFA
BUILDING MATERIALS	
	SHEN CONCERN
	MOVSISSIAN
	EUROSTAN
	CHARENTSAVAN
	ARM BRIT
	CJSC-ALCON
COMPUTERS & OFFICE EQUIPMENT	
	UNICOMP
	SIEMENS
	PUNIC Mac MILLAN
	ARMELECTROMASH
	COMPUTER Sce
	BI-LINE
	ARMENMOTOR
FUNITURE	
	TUFENKIAN
	NIKO
	MEK
	HAYGORG
AUTOMOBILE/SPARE PARTS	
	YERAZ
	ARMENIA - LADA

FIRMS INTERVIEWED	
AZERBAIJAN	
FOODSTUFF	
	KIT FOODS
COSMETICS	
	PARFUMS de France
COMPUTER & OFFICE EQUIPMENT	
	ALCATEL
	ARAZ COMPUTER
	SINAM INVEST
BUILDING MATERIAL	
	ABC CONSTRUCTION
	MONSIEUR BRICOLAGE
FUNITURE	
	AZERMASH
AUTOMOBILE/ SPARE PARTS	
	AZTOL
OIL/DRILLING EQUIPMENT	
	AZERMASH

FIRMS INTERVIEWED	
GEORGIA	
CLOTHING/TEXTILES	
	NECKERMANN
	BATA
	CALIFORNIE EXP[4]
	NATEXI
FOODSTUFF	
	MERCURE 92
	KAVKAS GREIN
	KAZBEGUI
	GWS
	FONDATION NATURE
	SOUPERINVEST 1
	ALIANCE
	RED CROSS
	AIDE POPULAIRE FRANCAISE
	ALMATEA
	SAMEBA
	COCA COLA
	MARTIN BAUER
	MUZA
COSMETICS	
	BETA 2
	MARGARITA
PHARMACEUTICALS	
	BETA 2
	VIT GEORGIA
	SYSTEM +
	CORP VET TRANS CAUCASIENNE
ELECTRONIC EQUIPMENT	
	TCHIMERI
	MZE
COMPUTER & OFFICE EQUIPMENT	
	COMPI
	ESABI
FURNITURE	
	LUKA
BUILDING MATERIALS	
	BEROLINA
	MIMOSI
AUTOMOBILE/SPARE PARTS	
	EURO MOTOR
	MEGA MOTOR
	MITSUBISHI
FERTILIZRS	
	FARMERS UNION

FIRMS INTERVIEWED	
KAZAKSTAN	
CLOTING/TEXTILES	
	PODYUM
	AKKO
	LIGA SAL
	KAZ HAL FOURN
	ANKARA TEXTIL
FOODSTUFF	
	VINS DE France
	KAZZAS
	CORP CONTR ALIM
	BATT CORP
	ASTANA FOOD
	SHAHAR TRADE
	MEDIKUS CENTER
	BUTYA
	BURG ALM LTD
	KAZPROM
	RAIMBEK FOOD
	KAZ HAL FOURN
COSMETICS	
	AKKO
	ERKE
	ATLAS cie
PHARMACEUTICALS	
	MEDIKUS CENTER
BUILDING MATERIALS	
	CORP BASIL "A"
	DOREEN LTD
	ALINA LTD
	REIS & Co
	ALMATY KOURYLYS
HOME APPLIANCES	
	BOSCH
	KAZZAS
	GLOTUR
	RAIMBEK JSC
	STINAL
	TURKUAZ
	BURG ALM LTD
COMPUTERS & OFFICE EQUIPMENT	
	COMEK
	GLOTUR
	AESL
	BUTYA
FURNITURE	
	BURG ALM LTD
AUTOMOBLIE / SPARE PARTS	
	MERCUR
MACHINERY & INDUSTRIAL EQUIPMENT	
	FERROSTAAL
	ACCEPT
	ATY RAOU
	AGRO PAK

FIRMS INTERVIEWED	
UZBEKISTAN	
CLOTHING/TEXTILES	
	SULZER INT
	BARS
FOODSTUFF	
	AVSTROS BELGIUM
	UZ WINKLER
	ROZ TRADING
	QUICK STOP GROUP
	COPACO
	BASTON ET FIRMINGER
	NESTLE
COSMETICS	
	ROZ TRADING
PHARMACEUTICAL	
	SANOFI
	MERC KGAA
	INNOTECH INT
	HOFFMANN LAROCHE
	BERLIN CHIMIE
	BEAUFOUR
	BARINGER INGELSHEIM
BUILDING MATERIALS	
	TEAM
	CHAMBON DMI
	BOUYGUES µ
HOME APPLIANCES	
	SIEMENS
COMPUTERS & OFFICE EQUIPMENT	
	RANK XEROX
PESTICIDES	
	RHONE POULENC AGRO
	BAYER
COTTON TRADERS	
	TEXTTILE ET COTON
	TEAM
	MEREDITH JONES
	PAUL REINHARDT
	LOUIS DREYFUS
	INDUTECH
	COPACO
	BAUMAN
	DEVCOT
	CENTRAL ASIA TRADING
	CARGILL

Annex 6 - 1

Terminal Facilities

Contents

1 Introduction

Container Terminals are the points in the transportation chain where container either loaded from a ship to truck or rail car and vice versa or from a railcar to a truck or vice versa. The handling capacity, the storage capacity and the rail and road connections are the main criteria's of the capacities of the container terminals.

2 Caucasus

2.1 Terminals in Georgia

The main container terminal in Georgia is the one in Poti-Port which serves the TRACECA route as entry point or exit point of the Caucasus as well as being the container terminal for Georgian exports and imports. In fact, the port itself has mainly the function to load and discharge containers from and to ship or railcars or trucks. It does not concern itself much with storage of containers. Around the port various private container terminal operators which are more or less in charge for depot and storage function.

2.1.1 Poti Port Container Terminal

The capacity of the container terminal in Poti Port is best described in the Tacis - Traceca "Feasibility Study of New Terminal Facilities in the Georgian Ports". It is planned to develop the berth no. 7 into a modern container handling facility. In the port of Poti all kinds of container can be handled and restrictions of the capacity are not to be anticipated.

2.1.2 Tbilisi Container Terminal

The Tbilisi container terminal cannot be used in its present condition for regular Intermodal Services. Only 20" container can be handled with adequate equipment. The storage area is not properly paved and the operation possible for 40" is the loading or discharging from rail car to truck by temporary leased mobile cranes but without spreader and with a high risk of damages.

Unless this Terminal will be renovated, no activities are foreseen for Tbilisi Container Terminal in the Intermodal Service Project.

2.2 Terminals in Armenia

The only real operating terminal in Armenia is Karmir Blur in Yerewan. This Terminal is equipped with sufficient equipment and at present under renovation. Their are no restriction in regard of handling and storage facilities. Also, the customs clearance for export and import containers is possible in a restricted area.

3 Central Asia (southern leg of the TRACECA Line)

3.1 Terminals in Turkmenistan

Most of the import traffic is concentrated in Ashkabad. For exports, there is little traffic that can be containerised, as most cotton shipments are sent by road to Bandar Abbas.
As a result, only the " KULYIEV " terminal located within 15 kilometres of Ashkabad is to be considered.

3.1.1 Turkmanbashi

The port is open to international traffic. A high amount of traffic comes via the ro-ro terminal in Turkmenbashi port. The port is for the time being sufficiently equipped with container handling equipment. The EU has under the Tacis - Traceca programme only recently financed some container handling equipment: two heavy lift forklifts, tug masters and several container chassis. This new equipment is mainly foreseen to be used for container ro-ro traffic from the ferries of Caspian Shipping Company, which arrive and depart to and from Baku.

Additionally, the port has 25 t cranes which can also handle containers. In the near future, the rehabilitation of the port is foreseen. This rehabilitation will be financed by EBRD credit.

3.1.2 Ashgabat (KULYIEV)

This terminal has the following characteristics :

- terminal operator: Turkmen Railways (Mechanic Division - west - : Head of Department Mr. SEIDOV)
- open to international traffic
- customs post
- customs agents on the site
- large warehouse (approx. 200 m; x 30 m.)
- bonded warehouse: approx. 360 sq.m.
- cranes:
  1 for 40 tons from Ukraine, no spreader for 40"
  1 for 20 tons from Ukraine with spreader for 20"
- stacking area: sufficient for present and foreseeable traffic (at present around 300 20" and 40" are stored)
- reach stacker / fork lift truck : No

Pick up /delivery services are to be organised together with the railways or without the railways with local truck operators.

3.1.3 Other Terminals :

As mentioned above there is so little traffic that other terminals should not be taken into account at the beginning of INTERMODAL SERVICE.

The main ones are MARY, CHARDJEW and TASCHAUS which can handle only 20" containers; theses terminals are open to international traffic however according to the railways. Others (NEBIT DAG e.g.) are not open to international traffic and should not be considered.

3.2 Terminals in Uzbekistan

Uzbekistan is one of the countries which enjoys a steady flow of container traffic; it has built and developed several operating terminals and modern handling equipment is available. 40" containers can thus be shipped to and from several places around the country.

Operators are either the Uzbek railways themselves or private operators, though these "private operators" might have strong links with Ministries or state enterprises.

Many terminals are open to international traffic and a table has been designed to summarise statistics showing their relative importance in terms of traffic.

On the following pages forms showing main features of the terminals which might be of interest to INTERMODAL SERVICE will be presented.

3.2.1 Bukhara Container Terminal

Address		38, Kagan chausse, Kagan, Bukhara region, Uzbekistan
Telephone		225.04.14, 225.15.91
Fax		25.15.91
Opening hours		8.00 – 20.00
Territory area		25.000 m2
Depot area		7.700 m2
Number of rail tracks		3 (three)
Length of rail tracks		1) 120 m, 2) 100 m (double)
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	1 and 4 from Tacis
Number of gantry cranes		5 units
Type		gantry cranes
Manufacturer		Russia
Capacity in tons		4 cranes – 10 tons, 1 crane – 20 tons
Number of mobile cranes		4 units
Number of Forklift trucks		4 and 20 from Tacis
Number of reefer connection points		8
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		yes
Customs agency on terminal		yes

3.2.2 Churkursay / Shumilovo Container Terminal

Address	82, Chukursay str., Chukursay station, Sabir Rakhimov region, Tashkent
Telephone	48.56.03, 48.86.55, 48.86.16
Fax	48.56.03
Opening hours	8.00 – 17.00
Territory area	49.600 m2
Depot area	49.600 m2
Number of rail tracks	6
Length of rail tracks	250 wagons

Technical possibilities

Handling:	Container	possible
	Swap bodies	no
	Trailer	no

Number of gantry cranes	Electrical gantry cranes – 12 units
Type	KK-6,3 – 1 unit, KZ05N – 2 units, KK-5 – 5 units, KK-20 – 2 units KPB10m – 2 units, Такраф – 1 unit
KK-25 – 1 unit	
Manufacturer	mainly Russian
Number of mobile cranes	no
Number of Forklift trucks	TCM – 1 unit
Number of chassis	no answer

Repair facilities	possible
Container cleaning facilities	yes
Customs on terminal	yes
Customs agency on terminal	yes

3.2.3 Djizak Container Terminal

Address		Djizak. Uzbekistan (Only domestic traffic)
Telephone		
Opening hours		8.00 – 20.00
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	no
Number of cranes		KK-6.3, KK- 5.5, KK20,
Type		electrical cranes
Manufacturer		Russia
Capacity in tons		6,3, +5.5,+ 20
Number of mobile cranes		-3
Number of Forklift trucks		-
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		no
Customs agency on terminal		no

3.2.4 Kakir Container Terminal

Address		Kakir (Kokand region), Fergana valley, Uzbekistan (Transit and domestic traffic)
Telephone		
Opening hours		8.00 – 20.00
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	no
Number of cranes		KK-20, KK-32, KK-305H
Type		electrical cranes
Manufacturer		Russia
Capacity in tons		20+32+30
Number of mobile cranes		-3
Number of Forklift trucks		-
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		no
Customs agency on terminal		no

3.2.5 Karshi Container Terminal

Address		Karshi, Uzbekistan(Tranzit and domestic traffic)
Telephone		
Opening hours		8.00 – 20.00
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	no
Number of cranes		KK-6,3, KK-20
Type		Electrical cranes
Manufacturer		Russia
Capacity in tons		6,3+20
Number of mobile cranes		-2
Number of Forklift trucks		-
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		no
Customs agency on terminal		no

3.2.6 Margilan Container Terminal

Address		Margilan, Fergana valley, Uzbekistan (Only domestic traffic)
Telephone		
Opening hours		8.00 – 20.00
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	no
Number of cranes		KK-6.3, KK-5,5, KK-20,KK-25
Type		electrical cranes
Manufacturer		Russia
Capacity in tons		6,3, +5.5,+20+25
Number of mobile cranes		-4
Number of Forklift trucks		-
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		no
Customs agency on terminal		no

3.2.7 Nukus Container Terminal

Address		Nukus, Uzbekistan (domestic traffic)
Telephone		
Opening hours		8.00 – 20.00
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	no
Number of cranes		KK-6,3, KK-20
Type		Electrical cranes
Manufacturer		Russia
Capacity in tons		6,3+20
Number of mobile cranes		-2
Number of Forklift trucks		-
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		no
Customs agency on terminal		no

3.2.8 Raustan Container Terminal

Address		Raustan, Namangan region, Uzbekistan (Only domestic traffic)
Telephone		
Opening hours		8.00 – 20.00
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	no
Number of cranes		KK-6.3, K-305н, KK-5,5
Type		electrical cranes
Manufacturer		Russia
Capacity in tons		6,3,+30 +5.5,
Number of mobile cranes		-
Number of Forklift trucks		-
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		no
Customs agency on terminal		no

3.2.9 Sergelli Container Terminal

Address		Sergeli station, Nilufar str., Sergeli region, Tashkent
Telephone		Trough MCH-1 Tashkent (136.11.53)
Fax		136.11.53
Opening hours		8.00 – 17.00
Territory area		31.200 m2
Depot area		31.200 m2
Number of rail tracks		4
Length of rail tracks		160 wagons
Technical possibilities		
Handling:	Container	16 /day
	Swap bodies	no
	Trailer	no
Number of gantry cranes		Electrical gantry cranes – 6 units.
Type		KKE-12,5 – 2 units, KK-32 – 1 unit, KK-25 – 1 unit, KPB10m – 10 units
Manufacturer		Russia
Number of mobile cranes		no
Number of Forklift trucks		no
Number of chassis		no
Number of refer connection points		no
Repair facilities		no
Container cleaning facilities		yes
Customs on terminal		yes
Customs agency on terminal		yes

3.2.10 Termez Container Terminal

Address		Termez, Uzbekistan (Transit and domestic traffic)
Telephone		
Opening hours		8.00 – 20.00
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	no
Number of cranes		K-305H, KK-20
Type		Electrical cranes
Manufacturer		Russia
Capacity in tons		30+20
Number of mobile cranes		-2
Number of Forklift trucks		-
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		no

Customs agency on terminal no

3.2.11 Tinchlik Container Terminal

Address		Tinchlik (Navoi region), Uzbekistan (domestic traffic)
Telephone		
Opening hours		8.00 – 20.00
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	no
Number of cranes		KK-6,3, KK-20, KK-25
Type		Electrical cranes
Manufacturer		Russia
Capacity in tons		6,3+20+25
Number of mobile cranes		-3
Number of Forklift trucks		-
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		no
Customs agency on terminal		no

3.2.12 Ulugbeck Container Terminal

Address		Ulugbeck (Samarkand region), Uzbekistan (Tranzit and domestic traffic)
Telephone		
Opening hours		8.00 – 20.00
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	no
Number of cranes		KK-6,3, KK-20, K-305H-2 units,KKC- 25,KK-5,5
Type		Electrical cranes
Manufacturer		Russia
Capacity in tons		6,3+20+60+25+5.5
Number of mobile cranes		-6
Number of Forklift trucks		-
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		no
Customs agency on terminal		no

3.2.13 Urgench Container Terminal

Address		Urgench, Uzbekistan (TranSit and domestic traffic)
Telephone		
Opening hours		8.00 – 20.00
Technical possibilities		
Handling:	Container	yes
	Swap bodies	no
	Trailer	no
Number of cranes		K-305.H, KKC-25
Type		Electrical cranes
Manufacturer		Russia
Capacity in tons		30+25
Number of mobile cranes		-2
Number of Forklift trucks		-
Repair facilities		yes
Container cleaning facilities		yes
Customs on terminal		no
Customs agency on terminal		no

3.3 Terminals in KYRGHIZSTAN

Rail is still the most important transport mode in Kyrghizstan. Though the majority of rail freight is loaded into regular wagons, containers are more and more in demand and a specific department of railways in charge of container traffic has been created.

There are 2 terminals in Kyrghizstan : Alamedin (Bishkek) and Osh. These terminals are ill equipped - mostly for previous small MPS containers(3, 5 and20 tons) - so that none of them is officially opened to 40" container traffic.

However, with prior permission from the railways, 40 " containers can be accepted in Alamedin. Alamedin is serving the main area with a population of approximately 1 million for the city of Bishkek plus at least as many people in the hinterland.

Osh is the second Kyrghiz city with half the population of Bishkek.

3.3.1 Bishkek (Alamedin terminal)

Container traffic : adverse conditions do not prevent container traffic from developing year after year. Railways figures show that during 1998 the traffic has been as follows :

- Imports : more than 4.000 TEUs
- Exports : definite figures have not been provided but approximately 150, 40" containers have been shipped in 1998.

These figures are surprisingly high considering that normally 40" containers are not allowed. It shows that, no matter what, more and more clients are demanding this kind of service.

Though no precise forecast can be calculated, the railways claim that they are faced with a 100% increase in 40" demands from the previous years; this trend is not surprising when compared to information gathered from the customs or a few clients and/or forwarders met by the experts.

In order to improve their capacity and open officially Alamedin to 40" containers, the Railways of Kyrghizstan requested assistance from the European Union in providing much needed equipment for their container terminals. The Commission's help is particularly appreciated at the start of the Intermodal Services project.

Handling Operations in Alamedin (Bishkek) :
At present only 20 tons cranes are available. When a 20" container weighs more than 20 tons or when a 40" is to be unloaded, the railways first ask the client to rent a crane and unload the container under his own responsibility. When the client insists, the railways may use two 20 ton cranes; but the operation is risky and if the container is not evenly loaded accidents may occur.

A crane able to lift 40" containers appears to be en urgent necessity if container traffic (including block-trains) is to be developed; it has been listed under the new Traceca programme.

Stacking Area :
At present 40" containers are left on the ground and limit space devoted to the circulation of lorries and trailers. This set-up cannot absorb any significant increase in traffic. The Railways declare that they have plans (and the budget) for surfacing a 300 x 35 meters zone adjacent to two rail tracks.
This improvement is necessary in order to use the modern equipment efficiently.

Pick-up and delivery :
The railways have no lorries and trailers adapted to the transport of containers. As a result, they cannot satisfy present customers demands. They insist that door-to-door service should be offered by their container department. Accordingly, 4 container chassis have been listed under the new Traceca programme.

3.3.2 Osh :

Osh traffic cannot be compared with the one in Bishkek. However, handling capacities exist and will be developed in Uzbekistan and Osh region might be served from Uzbek stations.

3.4 Terminals in KAZAKSTAN

Kazakstan enjoys an important container traffic already. Many terminals are in operation and could be used for the INTERMODAL SERVICE projects - as they are used for trains coming from Russia through the "north route" at present.

Individual reports covering the main terminals appear on the next pages.

The European Union has fully supported the renovation of some Kazak terminals and Traceca programmes have helped modernise Almaty and Chimkent terminals.

3.4.1 Almaty

ALMATY 1 is well equipped with a recent BOSS forklift truck (32 tons); besides, a Traceca programme has delivered a KALMAR (40 tons).

The grounds have been surfaced and , though not completely cleared from dust, are flat and make it possible to stack containers in two rows.

Management of this sophisticated piece of equipment might be improved however, as the consultant has observed that it was operated on a dirt road where mud and dust can contribute to wear off the hydraulic system sooner than expected.

If traffic was to pick up, a more effective organisation of the grounds might be needed (there is no need to deliver the containers to trucks waiting outside of the container grounds; the trucks can drive in; it would be safer for the handling equipment and faster)

In any case, this terminal is well suited for the INTERMODAL SERVICE project and deliveries in ALMATY area should not raise any difficulty.

3.4.2 Chimkent

Chimkent is a terminal owned by the railways and serving a very important area at the border of Uzbekistan. Traffic containers are concentrated in the Chimkent railway station and trains heading north are loaded there. It must be noted, however, that Chimkent is not normally open for 40" containers.

A former "base", which is a complex of warehouses, is situated very close to the container terminal.

Needless to say container traffic has been developed in the area and the station was lacking the proper equipment; it now enjoys a SISU 28 ton forklift, without spreader, provided under Japanese funding.

With this equipment, the needs have shifted to stuffing and stripping of the containers; therefore the railways, through their subsidiary running the terminals, have applied for assistance from the European Union. The next Traceca programme has included a provision of forklift trucks (12 of them) and of road equipment for delivery of the containers (2 tractors and 10 road chassis); this will undoubtedly ease the container operations in Chimkent.

3.4.3 Almaty 1 Container Terminal

Address	Almaty 1, Central Freight Station
Telephone	36.38.82 / 36.35.32 / 36.32.47 / 36.39.24
Opening hours	8:00 to 20:00 on week days (except from 1 to 2 p.m.)
Territory area	5 hectares
Depot area	8576 sq.m.
Number of rail tracks	2
Length of rail tracks	268 m.
Handling : containers	BOSS forklifter (32 tons) KALMAR 540 tons)
Number of cranes :	1
Type :	K 305
Capacity in tons :	20
Reefer connection points :	0
Repair facilities:	no
Container cleaning facilities	no
Customs on terminal	no
Customs agency	yes

3.4.4 Almaty 2 Container Terminal

Address	Almaty 2, 41, Polejaev Ul.
Telephone	60.50.56 / 60.42.17 / 60.42.27
Opening hours	8:00 to 20:00 on week days (except from 1 to 2 p.m.)
Territory area	10 hectares
Depot area	15.000 sq.m.
Number of rail tracks	4
Length of rail tracks	600 m.
Handling : containers	
Number of cranes :	1
Type :	KK 20 (TAKRAF)
Capacity in tons :	20
Reefer connection points :	0
Repair facilities:	yes
Container cleaning facilities	yes
Customs on terminal	yes
Customs agency	yes

3.4.5 Aktiubinsk Container Terminal

Address	Almaty 1, 41 Raziezd Ul.
Telephone	29 49 / 39 65
Opening hours	9:00 to 18:00 on week days (except from 1 to 2 p.m.)
Territory area	60.000 sq. m.
Depot area	10.000 sq.m.
Number of rail tracks	1
Length of rail tracks	312 m.
Handling : containers	
Number of cranes :	
Type :	
Capacity in tons :	
Reefer connection points :	0
Repair facilities:	no
Container cleaning facilities	no
Customs on terminal	no
Customs agency	yes

3.4.6 Astana Container Terminal

Address	Astana, 63 Lichatcheva Ul.
Telephone	22.17 / 22.07 / 22.66
Opening hours	9:00 to 18:00 on week days (except from 1 to 2 p.m.)
Territory area	40 hectares
Depot area	4480 sq.m.
Number of rail tracks	2
Length of rail tracks	140 m.
Handling : containers	BOSS forklifter (32 tons) KALMAR 540 tons)
Number of cranes :	2
Type :	K 305 H / KK 20 25
Capacity in tons :	20
Reefer connection points :	0
Repair facilities:	no
Container cleaning facilities	no
Customs on terminal	no
Customs agency	yes

3.4.7 Druzhba Container Terminal

Address	Druzhba
Telephone	21.37 / 22.37
Opening hours	8:00 to 20:00 on week days (except from 1 to 2 p.m.)
Territory area	9.000 sq. m.
Depot area	9.000 sq.m.
Number of rail tracks	1
Length of rail tracks	400 m.
Handling : containers	SISU (specific equipment)
Number of cranes :	
Type :	
Capacity in tons :	
Reefer connection points :	0
Repair facilities:	no
Container cleaning facilities	no
Customs on terminal	no
Customs agency	yes

3.4.8 Kustany Container Terminal

Address	Uzkokoleinaia, 33
Telephone	31.00 / 24.39 / 32.81
Opening hours	9:00 to 18:00 on week days (except from 1 to 2 p.m.)
Territory area	30.000 sq. m.
Depot area	15.040 sq.m.
Number of rail tracks	1
Length of rail tracks	470 m.
Handling : containers	
Number of cranes :	2
Type :	K 305H / MKKC 32
Capacity in tons :	20
Reefer connection points :	0
Repair facilities:	yes
Container cleaning facilities	yes
Customs on terminal	yes
Customs agency	yes

3.4.9 Uralsk Container Terminal

Address	Uralsk, Privokzalnaia Plochad
Telephone	33.07 / 21.31
Opening hours	8:00 to 17:00 on week days (except from 1 to 2 p.m.)
Territory area	80.000 sq. m.
Depot area	10.000 sq.m.
Number of rail tracks	
Length of rail tracks	
Handling : containers	
Number of cranes :	2
Type :	K 305H / KKC 20
Capacity in tons :	20
Reefer connection points :	0
Repair facilities:	yes
Container cleaning facilities	yes
Customs on terminal	yes
Customs agency	yes

4 Central Asia (north leg of the Traceca Line)

The north leg of the Traceca route crosses Kazakhstan via Aktau and serves efficiently north Kazakhstan.

When the Uzbek rail tracks linking Uch-Kuduk to Nukus will be completed and in operation (by the end of 1999), all Uzbek territory could be serviced from Aktau; distances from/to Uzbek cities via Turkmenbashi and via Aktau are equivalent and the Aktau route could become competitive.

This is a sound alternative to be considered for Uzbek customers provided services between Aktau and Baku are operated on a regular basis.

Though the present project cannot expect to benefit from both the Uzbek new line and the service to/from Aktau port before the end of the INTERMODAL SERVICE project, this option has to be carefully evaluated for the future commercial operator of the service.

4.1 – Aktau port

General situation :
AKTAU was built some 25 years ago from desert sands as a mid size research and industrial centre; there the soviet built the "fast neutrons" nuclear reactor. They built a modest port servicing local industrial production as well as local needs of the population.

Nowadays, AKTAU counts 150.000 people and the region 300.000 only. Aktau and its region can only be considered as transit area for Intermodal services.

With the independence of Kazakstan, AKTAU became their only "maritime" port. Thus, the authorities wish to develop it as the main entry gate to the country.

Loading / Unloading :
There used to be a ramp for ferries. As the sea level rose, part of the mechanism and the counter weights are now in deep water and the system cannot properly work any longer. No rail ferries can be loaded/unloaded at present and a renovated ramp could not be put in operation before the end of the project.

Equipment :
Cranes have been renovated and more modern equipment is now available as follows :

cranes :	3 renovated 40 tons cranes
mobile crane :	1, capacity 36 tons
reach stackers :	no
fork lifts (containers) :	no
spreaders :	2 for 40" containers (BRANDO, 5 tons)
road chassis :	10 new chassis

Storage of containers :
the port offers 2 stacking areas but they are far away from the cranes and there is no proper equipment to load and unload the containers from and to wagons.
There are no fences and no restricted areas; bonded areas are not available.

Storage of goods :
there is a new 6.000 sq. meter warehouse and a bonded warehouse 6 kilometres away.

Customs :
There is a customs post on the port premises in a small prefabricated building. Meanwhile the customs are building their own offices close to the office of the port administration.

7 customs agents are present on the site; theses are "private" businesses.

Counterparts :
The port and the Railways station are 18 km apart. The rail tracks in between belong to a company called KAZKOR and the service is provided by their subsidiary "KAZKOR TRANSERVICE".

The MOT is considering to open the port as the Aktau main station of the Kazak Railways in order to ease problems; in such case, railways transport rates would be computed from and to the port railways station.

Annex 6 - 2

Bukhara Cotton Terminal

Cotton Terminal Buchara

Based on the drawings received from the Tacis TRACECA Co-ordinator in Tashkent, the following recommendations can be made:

Productivity

Provided the forklift equipment is equipped with bale clamps which are in good condition the following productivity can be reached:

Discharging of Truck and / or Rail wagons
Per shift and man/forklift 50 tons

Packing of Cotton in Container
Per shift an man/forklift 3 to 4 40' Containers

Storage
It is possible to pack the bales 7 high (storage in cross form) which means approximately 0.6 tons per sqm.
The storage area needed depends on the time the cotton has to be stored. Considering that this time is in average 4 weeks, the following formula applies for 3000 tons:

3000 tons / 0.6 =		5.000	square meter
plus 10 %		500	-'-
plus 30 % for traffic in the			
Storage area	=	1.650	-'-
Total		7.150	square meter

This means the storage capacity per year amounts to 36.000 tons on 7.150 square meters or on a storage area of approximately 15000 square meters it amounts to 72.000 tons per year.

This storage capacity is higher if the storage time is lower.

With the exact dimension of the storage areas and the storage time a more exact calculation can be made.

Handling capacity with existing forklifts

Reach stacker and heavy forklift are obligatory for container operations and sufficient. A second forklift may be a standby engine.
Provided, the cotton is coming in and / or going out continuously, the following number of forklifts is necessary
(These operations include the scaling process and the packing of container)

Quantity	One shift	Two Shifts
3.000 tons	5	3
10.000 tons	14	7
15.000 tons	20	10
20.000 tons	24	12

Scales

For the above mentioned quantities a minimum 4 instead of 1 scale are needed. If the Container business will be developed it might be necessary to have a scale for weighing containers in total.

Platform leveller

The quantity of platform leveller seems to be sufficient. For quantities of more than 10.000 tons per month, the amount of platform levellers could be increased to 15.

Trailer and Trailer Tractor

Ass long as only one tractor is available, the amount of the Trailers are sufficient.

Conclusions

The capacity of Bukhara Cotton terminal has the limitation not in the equipment but in the storage and scaling field.

Annex 7

Agreements and Transport Routes

An Up-date of Central Asian Railways Agreements

International Agreements for European Union / CIS / Central Asia

1 Intra Traceca Zone Agreements

1.1 Context Actualisation

1.1.1 The Crucial role of railroad corridors

The centre of gravity of the world economy is moving progressively from West to East from the Europe and United States groupings, centred around the Atlantic, to the Asian - Pacific / Indian Ocean area, where most of the world's population lives. In the foreseeable future, this area will become one of the driving forces in the world-wide economy both in terms of growth and development.

Because most of Asia's industrial and investment equipment necessary for its growth comes from Europe, all business experts would agree to say that Asia will play an increasingly vital role in Europe's economic future.

The present world financial crisis shows the necessity to redirect financial flows towards real and material economy. This crisis will increase the economic power of Asia in general, and of China in particular, once Asian growth has resumed its upward trend. This growth situation will greatly influence Europe's economic future, and especially that of Russia, as Russia will serve as a bridge between Asia and Europe. Moreover, the railway corridors between both continents, particularly the Central Asian corridors will play a crucial role. Because of the distances involved, the planning of the railroad infrastructure in these corridors is of great importance.

All of the studies we have carried out show that the railroad corridors which link Europe to Asia create a very efficient and competitive network of transport which:

- allows Europe to gain access to markets in Central Asia, East Asia and South Asia,
- represents a powerful tool for the integrated economic development for the whole European-Asian economic area.

Not only do these corridors provide transport services for existing markets, but they shall also become a decisive factor, contributing to the expansion of future markets by allowing a more direct and easier access to the vast regions inside Asia.

Most of the major Eurasian cities are already served by the present long distance Euro-Asian railway corridor network. The importance of these corridors has been emphasised by all governments and economic and business interests in the region. These corridors will favour growth by stimulating economic activity throughout the surrounding areas.

1.1.2 The increase in the number of international meetings

These last few years, many international meetings and conferences have been devoted to developing the Euro-Asian railway transport links.

The recent contacts between Japan and China clearly show the new trends in Euro-Asian economic co-operation.

During the visit of the President of the Republic of China to Japan in November 1998, the two countries were able to create a common vision strengthening their co-operation on the eve of the twenty-first century. Both parties view the project of a Euro-Asian land bridge linking East Asia to Europe through Central Asia, as a positive factor for peace and stability for the whole continent. The two governments are convinced of the necessity to reinforce the transportation infrastructure between East Asia and Central Asia, and they encouraged further co-operation in that area. They also made public the "Japanese – Chinese joint declaration for implementing a friendship and co-operation partnership for peace and development".

The "second Euro-Asian land bridge" assumes a very important place in Chinese domestic development and foreign policy. This "second Euro-Asian land bridge" consists of a railroad line which links the port of Liangungang in eastern China to Kazakhstan through central and north west China, and continues through to Europe via Russia.

A similar development although it came from the West was Poland's proposed joint declaration regarding the Euro-Asian land bridge at a meeting held by a group of experts in September 1996. The purpose of this meeting was to develop railway transportation between Central and Eastern Europe, Belarus, Russia, Kazakhstan and China.

Within the scope of various agreements between neighbouring countries, the European Commission has taken several initiatives in this area, which concern four groupings:

- The Central European countries
- The new Independent States
- The EEC countries and Switzerland
- The Mediterranean basin countries.

The aim of these initiatives is to promote the integration between Western Europe Trans European Transport Network and the networks of these countries.

Within this wide context of Euro-Asian links the Commission, in co-operation with regional governments, launched the TRACECA project in 1998.

The EEC-UNO is currently preparing for the broadening of the AGC, AGTC and AGR agreements in order to incorporate the member countries of Caucasus and Central Asia. The EEC - UNO is also co-operating with the ESCAP (Economic and Social Commission for Asia and the Pacific) – UNO to implement a joint programme centred around the development of Euro-Asian transportation links. This programme will take into account the agreements mentioned above and the ALTID project of the CESAP, which has analysed traffic patterns according to traffic observation and planning.

Altogether, dozens of international meetings and conferences have been devoted to Euro-Asian railway transport links over the past few years. Some of the most important meetings are as follows:

- TRACECA – joint work session on co-ordination and development of the Europe-Caucasus-Asia transport corridor (1993).
- Conference on the repair and upgrade of the "historical silk road", TRACECA international summit (September 7 and 8 1998, Baku).

- OSJD commission II meeting regarding the elimination of hindrances to railroad services and traffic between borders, in particular going from SMGS railroad regulations to CIM regulations (1996).
- International symposium on the economic development of the new Euro-Asian overland bridge zone (1996).
- Trans-Eurasian summit on transport and exchange policy.
- Trans-Eurasian conference held in ALMATY, Kazakstan (May 20 to 23 1997).
- Trans-Eurasia 98, second international conference, held in ALMATY (May 19 and 20 1998).
- Third pan-European conference on transports, HESINSKI (June 1997).
- Euro-Asian international conference on transports, St-Petersburg (May 12 and 13 1998).
- CEMT seminar : " New trends in trade : new requirements for transports ", ANTALYA (October 22 1998).

The EEC-UNO is in the process of preparing an analysis of the results from these conferences. The following conclusions however, can be put forth:

- the development of railroad transportation between Europe and Asia requires an improvement in services and reliability, as well as the strengthening of the trust between consignors and the railways ;
- the reduction of the actual transit time alone will not be enough to draw traffic away from competing maritime enterprises ;

It is of utmost importance for railway credibility to ensure that delivery requirements in contracts are respected, and that has not been the case for numerous railroad links in the region ; one of the most important paths to reach this goal is to harmonise the legislation and regulations between the various countries in the region, and to incorporate this standardisation in all international agreements.

1.2 The volume and nature of goods transported

To illustrate the benefits for the Union and its Asian partners, it is useful to review the importance of these exchanges.

In 1994, the value of trade between the European Union and the Far East (Japan, Korea, China, Mongolia) was over 180 billion USD (data from OCDE in 1998). The value of trade between the Union and Central Asia (Russia and the newly independent States) was 47 billion USD.

Bulk goods, petroleum, mineral ore and chemical products primarily were transported by sea, by oil pipeline, and by railway. The main goods not sent in bulk were the following :
Food products, livestock, tobacco, beverages, animal and vegetable fats, machinery and transportation equipment, as well as various manufactured products. These goods were packaged in containers and transported by rail or by road.

Between 1989 and1994, the volume of trade between European and Asian countries increased as follows:

- the volume of heavy goods went up from 158 to 178 million tons (+ 13%).
- the volume of non heavy goods went up from 95 to 118 million tons (+ 24%).

In total, the volume of trade increased from 235 million tons to 296 million tons. Imports far exceeded exports, and by 1994 they amounted to 80 % of the total trade volume.

2 – Europe - Asia Railway Networks

Because of Asia's growing role in Europe's economic future, European investments in infrastructure, and in railroads in particular, will now be seen as a Euro-Asian joint venture. The growing power of China in the world-wide economy will clearly reveal the importance of the Euro-Asian land bridge.

The European Union has already decided to expand the Trans-European transport networks with a total of 10 Crete / Helsinki pan-European corridors going through Central and Eastern Europe.

The following corridors are of particular importance for European-Asian traffic patterns :

Corridor n° 2: Berlin – Warsaw – Minsk – Moscow – Nijni - Novgorod ;
Corridor n° 3: Berlin – Wroclaw – Katowice – Crocovie – Lvov – Kiev .
Corridor n° 4: Berlin – Prague – Budapest – Sofia ;
Corridor n° 5: Venice – Trieste – Ljubljiana – Budapest – Oujgorod – Lvov – Kiev ;
Corridor n° 9: Helsinki – St- Petersburg – Moscow – Kiev – Bucharest – Dimitrovgrad.

These corridors have all been integrated into the following major Europe-Asia trunk roads.
- The Trans-Siberian route : Moscow – Ekateringburg – Novosibirsk – Vladivostok – Ulan Bator – Peking;
- The Northern Trans-Asian route: Kiev – Moscow – Tchelyabinsk – Druzhba – Alashan Kou – Liangungang;
- The Central Trans-Asian route: Kiev – Volgograd – Almaty – Aktogay – Druzhba – Alashan Kou – Liangungang ;
- The Traceca route: Varna – Poti - Baku – Tashkent – Almaty – Aktogay – Druzhba – Alashan Ku – Liangungang ;
- The Southern Trans-Asian route: Istanbul – Ankara – Tabriz – Teheran – Meched – Saraks – Tashkent – Almaty – Aktogay – Druzhba – Alashan Ku – Liangungang.

The following borders have rail gauge variations :
Poland / Belarus
Poland / Ukraine
Hungary / Ukraine
Russia / China
Mongolia / China
Kazakstan / China
Iran / Turkmenistan

The Trans-Siberian railway is the oldest commercial freight path between Europe and the Far- East.

Since 1992, two other routes, the Northern and Central Trans-Asian trunk roads have been inaugurated, and the Kazak and Chinese networks have been linked together at Druzhba.
The TRACECA corridor and the Southern Trans-Asian route are already operational. Further investments have been planned to increase their mid-term capacity.

2.1 The characteristics of the Euro-Asian routes

The Trans-Siberian railway links Moscow to Vladivostok via Yaroslavl, Ekaterinburg and Khabarovsk. A ferry connects Vladivostok to Niigata on Japan's west coast. Between Vladivostok and Moscow, the Trans-

Siberian railway runs a completely electrified double track line for 10.000 km. It has a freight capacity of 100 million tons per year. In the past, the Trans-Siberian railroad has proved to be a commercially viable transportation link between Europe and the Pacific, (Japan included). In the future, the Trans-Siberian railroad will continue to play a major strategic role.

The potential for development of new services on the Trans-Siberian route was made clear at a CESAP – UNO / OSJD joint project, in April 1998. The following report highlights this potential: it took 8 days and 21 hours for a train transporting containers to cover the 10.500 km, from the port of Nakhodka (Vladivostok) to Moscow via Brest. This railroad route allowed for a time saving of about twenty days as compared to the sea route between Asia and Eastern Europe!

The Northern Trans-Asian railway links the port of Liangungang in Eastern China to Kazakhstan through Central and north-western China and to Europe through Russia. The Liangungang / Rotterdam rail line covering 10.900 km was opened in 1992, two years after the completion of the rail section between Urumchi and the Kazak border.

Since 1992, the Chinese portion of this railway line has been greatly modernised. Most of the 4.150 km of this section are now composed of a double track line, and 29 % of the rails have been electrified.

The surrounding Chinese provinces have co-ordinated their investment policy in order to develop their infrastructure with projects such as mining development and increased industrial production. A joint urban planning has been undertaken all along this land bridge. Further railway links will be created to facilitate access to the major Chinese ports and cities.

This second land bridge is 2.500 km shorter than the Trans-Siberian route, and 10.500 km shorter than the maritime route which stretches 22.000 km. At present, the second land bridge has a complementary role to that of the Trans-Siberian railway.

The Central Trans-Asian railway is located further to the south. This railroad line begins in Druzhba, and travels through Kazakhstan to reach Almaty where it continues through to the Ukraine and Russia. The chief advantage of this railway line is that it is the shortest route linking Central Europe to Asia.
There are however some disadvantages to using this railway line, particularly concerning the part running through the Ukraine. The quality of railroad maintenance in the Ukraine has definitely deteriorated.

The TRACECA route travels west from Druzhba, through Uzbekistan, Turkmenistan and the Caspian Sea (using a ferry from Turkmenbashi to Baku). It then heads through Azerbaijan and Georgia to Caucasus and the Black Sea (using a ferry from Poti to Odessa).
Most of the railroad section between Uzbekistan and Turkmenistan is composed of a non-electrified, single track line.

To shorten this route, there is a plan to develop and upgrade the port of Aktau in Kazakhstan. This port, when upgraded, would establish a direct link between Kazakhstan and Baku by ferry, eliminating the need to travel through Turkmenistan in the future.

The Southern Trans-Asian route travels south from Druzhba towards Iran and Turkey. It serves Istanbul and the Turkish ports of the Black Sea and the Mediterranean Sea. The Iranian / NIS (New Independent States) border has rail gauge variation. Iran operates a total of 5.995 km railroad tracks.

The Iranian section of the Southern Trans-Asian line links Saraks (at the Turkmen / Iranian border) to Razi (at the Iranian / Turkish border) and covers 2.010 km. This portion is composed of a non-electrified single

track line and the trains travelling on this route are diesel trains. Shortly after entering Turkey, the goods have to be transferred to cross the Van lake using a ferry.

The Turkish railway operates a 8.607 km long network running on the Southern Trans-Asian line which links Kapikay (at the Iranian / Turkish border) to Istanbul and Kapikulu (at the Turkish / Bulgarian border). At present, only 46% of this network is electrified and only 10% of it runs a double track line. Other railway links stem out of this line to connect Kapikay to Samsun along the Black Sea, and Kapikay to Iskenderun and Mersin along the Mediterranean Sea.

3 Central Asia's current railway regulations

The present situation with regards to railway regulations for all countries in the Central Asian / Caucasian area shows that businesses are still highly controlled by the State.

All the various networks are:

either State networks under direct State supervision, operated as a Public Administration run by a Minister;
or public service networks run by majority State owned companies.

In either case, national laws rule the statutes and the activities of the railway networks.

These national laws have drawn their inspiration from the "little green book" of the USSR railway law. This "little green book" still remains the underlying basic reference common to all Central Asian countries.

The creation of a joint railway code common to all Central-Asian countries and based on the USSR railway law has been under study within the framework of the following TRACECA project :

- legal and Regulatory Framework Project TELREG 9306
- this project covers the following major items:
- public service principles and requirements;
- railway, State and other public communities relations;
- financial and accounting principles;
- legal transportation framework and railway liability principles;
- railroad security and railroad police.

The new Railway Code is in the process of being adopted.

Because the USSR railway law has established common juridical practices, the harmonisation of legal and regulation clauses is now well underway. However, this Code further adopts two new orientations :

bringing together domestic regulations in line with SMGS and CIM international regulations ;
opening railway statutes to greater autonomy from State supervision .

The new trend in Central Asian and Caucasian railway regulations is toward further liberalisation, a trend which has been adopted by Western and Central European countries.

These regulatory aspects have been studied within the framework of a second TRACECA project, along the lines of the first TRACECA project (TELREG 9306) mentioned above : the TRACECA Railway Inter-State Tariff and Timetable Structure TNREG 9501.

The SARAKS Agreement was signed on May 13, 1996 by Azerbaijan, Georgia, Uzbekistan and Turkmenistan. This major regional agreement alone constitutes the foundation of railway co-operation between Caucasian and Central Asian countries.

In the SARAKS Agreement, Azerbaijan, Georgia, Uzbekistan and Turkmenistan have agreed to join their effort in developing the railway network linking Eastern Asia to Europe.

The two major aspects of the SARAKS Agreement are the form and nature of the agreement.

There are indeed two SARAKS Agreements.

The first agreement signed by the governments of the four countries involved is a political proceeding which has opened a free transit zone for the four signatory countries. The following current advantages apply to this transit zone:

goods and merchandise in transit are tax exempt whether the goods or merchandise being transported have to be transferred, handled, or even stored temporarily;
cross border custom control procedures for goods and merchandise in transit have been simplified;
adoption of the "most favourite nation" clause which stipulates that any preferential rate one of the four signatory countries benefits from is automatically applied to all other signatory countries.

The first SARAKHS agreement stands as an International Convention signed by the following State representatives:

For Azerbaijan: Heydar ALIEV
For Georgia: Edward CHEVARDNADZE
For Uzbekistan: Islam KARIMOV
For Turkmenistan: Saparmurat NIAZOV

Turkmenistan is the SARAKS agreement's depository State. This agreement has been written in Russian as well as in all four signatory countries' native languages.

The SARAKS agreement has been initially concluded for a ten year period, renewable for similar 10 year periods, with provision to termination six months before the end of a given 10 year period. This agreement can be extended to any of the four signatory countries' neighbouring state provided that they share a technical relation with one of the four signatory countries in terms of transportation networks.

The second SARAKS agreement is to be considered as an implementation of the first agreement.

Both agreements were concluded on May 13, 1996. Within the framework of the second agreement, the four signatory countries' heads of railway administrations made major decisions regarding transportation tariffs. These decisions have been meant to bring about the following practical consequence : the creation of a financially attractive international railway network along the TRACECA corridor to further encourage business relations among Caucasian and Central Asian CIS countries.

The first SARAKS agreement constitutes therefore the political ground for the second and technical agreement.

The technicality of this agreement can be expressed as follows : de-restriction of ETT and MTT tariffs.

The basis of the SARAKS railway agreement lies in the creation of a significantly attractive tariff policy common to the four signatory countries.

New international ETT and MTT transit tariff measures have been taken, and a 50 % reduction has to be applied to the general level of tariffs determined yearly by the railway Committee.

In practice, a 50 % discount has not been systematically applied to all ETT and MTT international transit tariffs applicable to relations between the four signatory countries.

The SARAKS railway agreement has not exactly fixed a set discount for ETT and MTT international transit tariffs. These tariffs have a maximum limit and are therefore open to all other contractual discounts. The SARAKS agreement is normally taking a step forward by directly applying a 50 % discount on the tariffs maximum limit.

In line with the first politically oriented SARAKS agreement, the SARAKS railway agreement fully stands as an international agreement departing from the railway Committee agreement, this latter however not being challenged.

The other technical implementations :

The SARAKS agreement has adopted other more secondary tariff adjustments such as discounts based on services offered in railway stations or in multi-modal port installations.

In order to simplify customs procedures, the SARAKS agreement has made mention of the specific border points where control operations are carried out.

The organs of the agreement :

Various specific measures arranged for in the first agreement and which have been further developed within the framework of the railway agreement, specify that :

- The railway administration chief executives for the four signatory countries will meet at least once a year and at most whenever necessary to assess the agreement current state of implementation and to list the difficulties which may have arisen during the bringing into play of this agreement.
- Bilateral agreements may be made between railway networks in order to facilitate the agreement implementation.
- Apart from the procedures created by the CIS and Baltic Countries Railway Committee to facilitate joint decision making, further co-operation is expected from the services composing the four SARAKS railway administrations, particularly for trading equipment.
- Any " shipper " registered with the National Railway Administration of a given country will now be systematically registered with the National Railway Administrations of the other three countries.

The SARAKS agreements have been registered and filed at the OCCHF (OSShO) in Warsaw, and at the CIS and the Baltic States Railway Committee in Moscow.

The CIS and the Baltic States Railway Committee was created by the CIS governments in February 1992. The purpose of this committee has been to develop a common modernisation policy, to co-ordinate railway activities and to harmonise the technical norms of the countries involved.

The first agreement between the Baltic States and the CIS was signed as early as May 1st, 1994 under the aegis of the Railway Committee. It allowed for the implementation of common tariffs and running procedures for the Baltic States and the CIS railway networks.

In addition to dealing with obvious tariff concerns, a major problem common to all the networks has had to be solved: most of the CIS countries saw their merchandise traffic revenue drop dramatically following the split in SZD (the USSR railroads), and since that split, their national production has decreased noticeably.

4 Institutional Evolutions

Since the end of the USSR era, national railway companies which used to be part of the Soviet bloc started drawing closer to U.I.C. (PARIS). Over the last three years Caucasian and Central Asian national railway companies have continued that trend towards U.I.C.

This tendency clearly shows the growing influence of the Western organisation (U.I.C.) over the Soviet organisation (OSShD) and is parallel to the assimilation projects of the SMGS convention by the CIM convention.

However, the general trend towards closer relations with U.I.C. does not apply to Russia nor to the countries which still depend upon Russia.

The new members of U.I.C. are :

- Armenia : associate member since 1996
- Azerbaijan : associate member since 1996
- Georgia : associate member since 1998
- Turkmenistan : associate member since 1997

Negotiations with the following countries are underway :

- Uzbekistan
- Kazakstan

This new situation reflects Caucasus and Central Asia's railroad and political reality.

The countries which have their railway network to the South and the Black Sea, in other words Caucasus and Turkmenistan, have shown a strong desire for independence. On the contrary,

Russia and the countries whose railway networks are closer to the north route, and consequently closer to Moscow, have adopted a wait and see policy. Because of Russia's wait and see policy, negotiations to bring together the two international railway conventions (CIM and SMGS) have made little progress over the last three years.

Annex 7.1

Transport Routes

Rail routes from TASHKENT to Western Europe (Frankfurt)

From	Routing	Distance (Km) 1*	Number of border crossings 2*	Nber of transhipments	
				At BOG point 3*	In ports
Tashkent	1. Kazakhstan -Russian Federation (Ekaterinburg) - Belarus - Poland	7250	5	1	0
	2. Kazakhstan- Russian Federation (Orenburg) - Belarus - Poland	5650	5	1	0
	3. Kazakhstan (Arys,Makat) - Russian Federation (Astrakhan) - Ukraine - Poland	6200	5	1	0
	4. Uzbekistan (Nukuss) - Kazakhstan (Makat) - Russian Federation (Astrakhan) - Ukraine - Poland *4*	6300	5	1	0
	5.Uzbekistan (Nukuss) - Kazakhstan (Makat) - Russian Federation (Orenburg) - Belarus- Poland *4*	6550	5	1	0
	6.Turkmenistan - ***Caspian Sea*** - Azerbaijan - Russian Federation (Samur, Moscow) - Belarus - Poland	7050	6	1	0
	7.Turkmenistan - Caspian Sea - Azerbaijan -Georgia - Russian Federation (Veceloye, Moscow) - Belarus - Poland	7400	7	1	0
	8.Turkmenistan - Caspian Sea - Azerbaijan - Russian Federation (Samur) - Ukraine - Poland	6500	6	1	0
	9. Uzbekistan - Turkmenistan - Caspian Sea - Azerbaijan - Georgia - Black Sea - Bulgaria - Romania - Central Europe	6800	7	1	0
	10.Turkmenistan - Caspian Sea - Azerbaijan -Georgia- Black Sea - Ukraine - Poland	6250	6	1	2
	11.Turkmenistan - Caspian Sea - Azerbaijan -Georgia- Black Sea - Bulgaria - Romania - Central Europe	6000	9	0 (5*)	2
	12. Turkmenistan - Islamic Republic of Iran - Turkey (crossing of Lake Van and to port of Samsum) - Ukraine - Poland	7450	6	2	4 (6*)
	13. Turkmenistan - Islamic Republic of Iran - Turkey (crossing of Lake Van and to port of Bosphorus) - Bulgaria - Romania - Central Europe	7400	9	1	4 (6*)

1 Distances are rounded to the nearest 50 or 100 km*
2 Ferry services have been counted as one border crossing whenn they connect ports located in different countries*
3 BOG = break -of-gauge*
4 When the planned link between Uchkuduk and Nukuss is completed ;*
5 In this particular case, the break-of-gauge is concealed by the necessity to tranship from ferry onto rail wagons*
6 Pending the completion of the Lake Van by-pass and of the tunnel under the Bosphorus (expected date of completion : year 2002)*

Rail routes from ALMATY to Western Europe (Frankfurt)

From	Routing	Distance (Km) *1*	Number of border crossings *2*	Nber of transhipments	
				At BOG point *3*	In ports
Almaty	1. Russian Federation (Ekaterinburg) - Belarus - Poland	6500	4	1	0
	2. Russian Federation (Orenburg) - Belarus - Poland	6450	4	1	0
	3. Russian Federation (Astrakhan) - Ukraine - Poland	7000	4	1	0
	4. Uzbekistan - Turkmenistan - ***Caspian Sea*** - Azerbaijan - Russian Federation (Samur, Moscow) - Belarus - Poland	8000	7	1	0
	5.Uzbekistan - Turkmenistan - ***Caspian Sea*** - Azerbaijan -Georgia - Russian Federation (Veceloye, Moscow) - Belarus - Poland	8300	8	1	0
	6.Uzbekistan - Turkmenistan - ***Caspian Sea*** - Azerbaijan - Russian Federation (Samur) - Ukraine - Poland	7400	7	1	0
	7.Uzbekistan - Turkmenistan - ***Caspian Sea*** - Azerbaijan -Georgia - Russian Federation (Veceloye) - Ukraine - Poland	7750	8	1	0
	8.Uzbekistan - Turkmenistan - ***Caspian Sea*** - Azerbaijan -Georgia - ***Black Sea*** - Ukraine - Poland	7150	7	1	2
	9.Uzbekistan - Turkmenistan - ***Caspian Sea*** - Azerbaijan -Georgia - ***Black Sea*** -Bulgaria - Romania - Central Europe	6900	8	0 (4*)	2
	10.Uzbekistan - Turkmenistan - Islamic Republic of Iran - Turkey (crossing of ***Lake Van*** and to port of ***Samsum***) - Ukraine - Poland	8400	7	2	4 (5*)
	11.Uzbekistan - Turkmenistan - Islamic Republic of Iran - Turkey (crossing of ***Lake Van*** and to port of ***Bosphorus***) - Bulgaria - Romania - Central Europe	8300	10	1	4 (5)

1 Distances are rounded to the nearest 50 or 100 km*
2 Ferry services have been counted as one border crossing whenn they connect ports located in different countries*
3 BOG = break -of-gauge*
4 In this particular case, the break-of-gauge is concealed by the necessity to tranship from ferry onto rail wagons*
5 Pending the completion of the Lake Van by-pass and of the tunnel under the Bosphorus (expected date of completion : year 2002)*

Rail routes from ASHGABAT to Western Europe (Frankfurt)

From	Routing	Distance (Km) *1*	Number of border crossings *2*	Nber of transhipments	
				At BOG point *3*	In ports
Ashgabat	1. Uzbekistan (Tashkent) - Kazakhstan (Arys,Kandagach) - Russian Federation (Orenburg) - Belarus - Poland	6950	6	1	0
	2.Uzbekistan (Nukuss) - Kazakhstan (Makat, Kandagach) -Russian Federation (Orenburg) - Belarus - Poland	6550	6	1	0
	3. Uzbekistan (Nukuss) - Kazakhstan (Makat) -Russian Federation (Astrakhan) - Ukraine - Poland *4*	6300	6	1	0
	4. ***Caspian Sea*** - Azerbaijan - Russian Federation (Samur, Moscow) - Belarus - Poland	5800	5	1	0
	5. ***Caspian Sea*** - Azerbaijan -Georgia - Russian Federation (Veceloye, Moscow) - Belarus - Poland	6100	6	1	0
	6. ***Caspian Sea*** - Azerbaijan - Russian Federation (Samur) - Ukraine - Poland	5200	5	1	0
	7. ***Caspian Sea*** - Azerbaijan -Georgia - Russian Federation (Veceloye) - Ukraine - Poland	5500	6	1	0
	8. ***Caspian Sea*** - Azerbaijan -Georgia - ***Black Sea*** - Ukraine - Poland	4950	5	1	0
	9. ***Caspian Sea*** - Azerbaijan -Georgia - ***Black Sea*** -Bulgaria - Romania - Central Europe	4700	8	0 (5*)	2
	10. Islamic Republic of Iran - Turkey (crossing of ***Lake Van*** and to port of ***Samsum***) - Ukraine - Poland	6600	5	2	4 (6*)
	11. Islamic Republic of Iran - Turkey (crossing of ***Lake Van*** and to port of ***Bosphorus***) - Bulgaria - Romania - Central Eurc	6550	8	1	4 (6*)

1 Distances are rounded to the nearest 50 or 100 km*
2 Ferry services have been counted as one border crossing whenn they connect ports located in different countries*
3 BOG = break -of-gauge*
4 When the planned link between Uchkuduk and Nukuss is completed ;*
5 In this particular case, the break-of-gauge is concealed by the necessity to tranship from ferry onto rail wagons*
6 Pending the completion of the Lake Van by-pass and of the tunnel under the Bosphorus (expected date of completion : year 2002)*

Rail transit times from TASHKENT to Western Europe (Frankfurt) - In days -

From	Routing	Distance (Km)	Using regular rail services	Block-trains 750 km/day	Block-trains 1000 km/day
Tashkent	1. Kazakhstan -Russian Federation (Ekaterinburg) - Belarus - Poland	7250	31	15	12
	2. Kazakhstan- Russian Federation (Orenburg) - Belarus - Poland	5650	26	12.5	10.5
	3. Kazakhstan (Arys,Makat) - Russian Federation (Astrakhan) - Ukraine - Poland	6200	27.5	12.5	11
	4. Uzbekistan (Nukuss) - Kazakhstan (Makat) - Russian Federation (Astrakhan) - Ukraine - Poland *4*	6300	28	13.5	11
	5.Uzbekistan (Nukuss) - Kazakhstan (Makat) - Russian Federation (Orenburg) - Belarus- Poland *4*	6550	29	14	11
	6.Turkmenistan - ***Caspian Sea*** - Azerbaijan - Russian Federation (Samur, Moscow) - Belarus - Poland	7050	33.5	17.5	14
	7.Turkmenistan - Caspian Sea - Azerbaijan -Georgia - Russian Federation (Veceloye, Moscow) - Belarus - Poland	7400	33.5	18.5	14.5
	8.Turkmenistan - Caspian Sea - Azerbaijan - Russian Federation (Samur) - Ukraine - Poland	6500	31.5	17	13
	9. Uzbekistan - Turkmenistan - Caspian Sea - Azerbaijan - Georgia - Black Sea - Bulgaria - Romania - Central Europe	6800	33.5	17.5	14
	10.Turkmenistan - Caspian Sea - Azerbaijan -Georgia- Black Sea - Ukraine - Poland	6250	33.5	22	17
	11.Turkmenistan - Caspian Sea - Azerbaijan -Georgia- Black Sea - Bulgaria - Romania - Central Europe	6000	36.5	22.5	18
	12. Turkmenistan - Islamic Republic of Iran - Turkey (crossing of Lake Van and to port of Samsum) - Ukraine - Poland	7450	37	22.5	16.5
	13. Turkmenistan - Islamic Republic of Iran - Turkey (crossing of Lake Van and to port of Bosphorus) - Bulgaria - Romania - Central Europe	7400	37	18.5	14

Rail transit times from ALMATY to Western Europe (Frankfurt) - in days -

From	Routing	Distance (Km)	Using regular rail services	Block-trains 750 km/day	Block-trains 1000 km/day
Almaty	1.Russian Federation (Ekaterinburg) - Belarus - Poland	6500	29.5	14.5	12
	2.Russian Federation (Orenburg) - Belarus - Poland	6450	29.5	14.5	12
	3. Russian Federation (Astrakhan) - Ukraine - Poland	7000	31	15.5	12.5
	4. Uzbekistan - Turkmenistan - ***Caspian Sea*** - Azerbaijan - Russian Federation (Samur, Moscow) - Belarus - Poland	8000	39	21	17
	5. Uzbekistan - Turkmenistan - ***Caspian Sea*** - Azerbaijan -Georgia - Russian Federation (Veceloye, Moscow) - Belarus - Poland	8300	41	21.5	17.5
	6. Uzbekistan - Turkmenistan -***Caspian Sea*** - Azerbaijan - Russian Federation (Samur) - Ukraine - Poland	7400	37	20	16
	7. Uzbekistan - Turkmenistan -***Caspian Sea*** - Azerbaijan -Georgia - Russian Federation (Veceloye) - Ukraine - Poland	7750	39	21	17
	8.Uzbekistan - Turkmenistan - ***Caspian Sea*** - Azerbaijan -Georgia - ***Black Sea*** - Ukraine - Poland	7150	40	25.5	20
	9.Uzbekistan - Turkmenistan -***Caspian Sea*** - Azerbaijan -Georgia - ***Black Sea*** -Bulgaria - Romania - Central Europe	6900	42	26	21
	10.Uzbekistan - Turkmenistan -Islamic Republic of Iran - Turkey (crossing of ***Lake Van*** and to port of ***Samsum***) - Ukraine - Poland	8400	43	26	19.5
	11.Uzbekistan - Turkmenistan - Islamic Republic of Iran - Turkey (crossing of Lake Van and to port of Bosphorus) - Bulgaria - Romania- Central Europe	8300	42	21.5	17

Rail transit times from ASHGABAT to Western Europe (Frankfurt)- in days

From	Routing	Distance (Km)	Using regular rail services	Block-trains 750 km/day	Block-trains 1000 km/day
Ashgabat	1.Uzbekistan (Tashent) -Kazakhstan (Arys, Kandagach) - Russian Federation (Orennburg) - Belarus - Poland	6950	31	15	12
	2.Uzbekistan (Nukuss) - Kazakhstan (Makat - Kandagach) -Russian Federation (Orenburg) - Belarus - Poland *4*	6550	30	14.5	11.5
	3. Uzbekistan (Nukuss) - Kazakhstan (Makat) - Russian Federation (Astrakhan) - Ukraine - Poland *4*	6300	29	14	11.5
	4.***Caspian Sea*** - Azerbaijan - Russian Federation (Samur, Moscow) - Belarus - Poland	5800	28.5	15.5	12
	5.***Caspian Sea*** - Azerbaijan -Georgia - Russian Federation (Veceloye, Moscow) - Belarus - Poland	6100	30.5	16.5	13
	6.***Caspian Sea*** - Azerbaijan - Russian Federation (Samur) - Ukraine - Poland	5200	26.5	15.5	11.5
	7.***Caspian Sea*** - Azerbaijan -Georgia - Russian Federation (Veceloye) - Ukraine - Poland	5500	28.5	15.5	12
	8.***Caspian Sea*** - Azerbaijan -Georgia - ***Black sea*** -Ukraine - Poland	4950	29	20	15
	9.***Caspian Sea*** - Azerbaijan -Georgia -***Black sea*** - Bulgaria - Romania - Central Europe	4700	31	20.5	16.5
	10.Islamic Republic of Iran - Turkey (crossing of ***Lake Van*** and to port of ***Samsum***) - Ukraine - Poland	6600	33.5	21	15
	11. Islamic Republic of Iran - Turkey (crossing of ***Lake Van*** and to port of ***Bosphorus***) - Bulgaria - Romania - Central Europe	6550	33.5	17	12.5

DISTANCES FROM THE CASPIAN SEA TO DESTINATION (TERMINAL)

Via the 3 routes : TURMENBASHI / AKTAU and around Kazakstan / AKTAU and trough UZBEKISTAN (when railways completed)

FROM	TO	via TURKMENBASHI					via AKTAU			DIFF	Via AKTAU / through UZBEKISTAN				
		Turkm/ Chardjew	Chardjew destin. or Chengeldy	Chengeldy destination or Lugovaia	Lugovoi destin.	TOTAL	Aktau destin. or Lugov. or Chengeldy	Lugovaia or Chengeldy destin.	TOTAL		Aktau Beineou	Beineou dest. or Chengeldy	Chengeldy Lugovaia or destin.	Lugovaia destin.	TOTAL
Caspian Sea	UZBEKISTAN														
	Bukhara 2	1163	111			1274	2524	702	3226	1952	422	739			1161
	Tashkent	1163	708			1871	2524	79	2603	732	422	1349			1771
	Fergana	1163	711			1874	2524	400	2924	1050	422	1461			1883
	KAZAKSTAN														
	Astana	1163	787	1614		3564	3984		3984	420	422	1428	1614		3464
	Almaty 2	1163	787	911		2861	3281		3281	420	422	1428	911		2761
	Chimkent	1163	787	156		2106	2526		2526	420	422	1428	156		2006
	KYRGHIZSTAN														
	Lugovaia (border)	1163	787	476		2426	2846		2846	420	422	1428	476		2326
	Bishkek	1163	787	476	120	2546	2846	120	2966	420	422	1428	476	120	2446

Tacis

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