Traceca Intermodal Services

Project Progress Report 3

December 1999

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 3
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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 Yerevan, 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

In the past the Consultants have prepared the framework for the implementation of intermodal transports, focussing on contracts with Ministries, Railway-Companies, Terminals and Ports. The agreements concluded as well as the organisational arrangements prepared so far are already adequate to respond to the demands for transport arrangements.
But the actual execution of transport services in daily business operations met some unforeseen difficulties. This necessitated the renegotiations of some problematic items with the parties involved.

The last analysis of the Consultant showed the following:

a. The tariff structures and price modules within the whole transport chain were not competitive. The rebates and concessionary rates, which were partly granted during the first phase of the project by Railway Companies, Terminals and Ports, were not sufficiently competitive to offer a reasonable price structure to meet customers' demands. It became apparent that competitors in the market enjoyed more favourable rates. The lack of empty containers (caused by imbalances between export and import), the containers being always "in the wrong area at the wrong time", results in additional empty transport requirements and additional handling. These activities burden the total price too much.

b. The idea of using several local depots for a certain number of carriers' own equipment could not be implemented as envisaged. In their offer prices, freight forwarders always take into consideration a round-trip by truck for the repositioning of empty containers. Their agents try to get the stripped containers back immediately to places where the chance of new employment with cargo is easier (mainly to Poti port).

c. Potential customers and their decision makers, in particular in the local manufacturing sectors, could not easily be identified and the basis for their transport choices could not easily be ascertained. Also it was found that the relationship between forwarders, agents, traders and producers were strictly closed against any newcomers to the market. These connections have of course something to do with other considerations besides official tariffs.

d. The organisation of procedures and documentation of intermodal transport by extending the transport services within the transport chain up to the overseas carriers was quite unknown to potential customers. The offer of a total transport package, comprising all activities from transport with different modes to documentation processing to customs clearance etc., for a fixed price was met with disbelieve or suspicion and needed comprehensive explanation and patient persuasion in many cases

e. There is still a high demand for training of local employees and partner organisations in the areas of sales and marketing and the understanding of customer services. This lack of knowledge has partly been overcome by training measures in the partner states. One problem in this respect is the frequent fluctuation of personnel in the partner organisations, making continuous work with these organisations and the training of their staff very difficult. For instance, since the start of the project all staff members of the marketing department of the port of Poti have changed; in Kazakhstan, the nominated partner organisation was changed several times; in Turkmenistan we never received any responses to our various inquiries, it took till December to achieve more than courtesy conversations with a potential partner.

f. The competitors in the market, their organisation, their reactions on prices and their service quality have been analysed as far as possible. We have found that, regardless of all difficulties in the area, the pure existence of a rail-oriented transport organisation like the current project, the **SilkRoadExpress (SRE)**, has already led to reactions of the local trucking companies in the market. When the SilkRoadExpress published its first rate structure in May, the trucking industry immediately retaliated by lowering their rates below SRE's offer. Despite the fact that SRE did not carry any significant amount of containers between the publication of the first and the second rate structure (in August), the trucking industry lowered their freight rates considerably again. Only SRE's third price offer was not undercut by competition. On the relation Poti – Baku for example, the freight rates decreased by more than 35% in reaction to the potential new competitor SilkRoadExpress.

In the range Poti to Armenia and back most of the containers are still carried by trucks and not by railway. This is a result of the fact that the trucking companies, which are mostly working as subcontractors for shipping companies, have reacted to the implementation of new railway tariffs by reducing their own rates by around 40% to 50%, which amounts at least to 50 to 75 USD per container below the combined rates of Armenian and Georgian Railways. Detailed investigations showed that the Local Railway Station Charge in Poti and the Transit Declaration Fee are decisive factor. The Local Railway Station Charge is levied only on rail carriage, not on truck transport. The Transit Declaration Fee, due when crossing any Georgian border, amounts to about 120,-- USD per single Bill of Lading, regardless of the number of containers carried under that B/L. This means, that in case 10 containers are on one Bill of Lading, the costs per container are only 12,-- USD. But if single containers are transported the costs are 120,- USD per container. Contrary to rail transport, where the B/L has to be on the train, it is customary for truck transport that only the first or the last truck carries the B/L. Thus, local trucking companies, which carry single containers, claim at the border that their container is part of a combined B/L, the other containers being carried by other trucks, and they are charged only a part-fee for transit declaration accordingly. This is not legal but works quite profitable for all sides concerned.

Conclusion:
The market chances for rail bound container traffic will be positive in case the following pre-conditions are fulfilled:

Pre-Conditions	**Estimated time frame**
• Meeting with key accounts to inform about the new service	Has been started. Permanent contact with the top 30 key accounts is maintained
• Promotion of the intermodal service, advertising	Continuously
• Training in marketing and canvassing of cargo by local personnel and partner organisations	Permanent process. Training activities have been concluded by end of December 1999, except for training in Turkmenistan
• Contacts with local shipping agencies in order to define the fields of activity	Contacts to the top 7 shipping agencies have been made by the end of October 1999
• Contacts with freight forwarders and operators to win them as partners or as subcontractors for distribution inside the countries and door-to-door delivery to places without rail connections	Has been started. The top 10 companies have been contacted by the beginning of November 1999
• Establishment of depots for empty containers in the central transport hubs, initially in Baku and Poti	Negotiations for the first agency (LMA for CMA in Baku) and for most important shipping companies will be finalised until beginning of February. A Depot has been established in Baku port.
• Training of personnel on value added services (minor repairs, cleaning, technical checking etc.) in the ports that have a depot	Permanent process; initial activities have been completed at end of December 1999
• Public Relation measures with price incentives for first users in the LCL business	Promotion campaign for the SilkRoadExpress has been started. An advertising campaign with a new tariff has been started.
• Intensive contacts with clients according to a list of priorities	Permanent process

From the beginning of this year training activities on location have been carried out. They started with terminal operations training in the different container terminals, based on a very practice-oriented approach. This training was supplemented by training in marketing and business development for employees from all parties involved in the transport process, in the Caucasus as well as in Central Asia. Furthermore, three study tours on the organisation and realisation of intermodal transports to Western Europe took place. See the **Special Training Report.**

3 Summary of Project Planning for the Remainder of the Project

3.1 Implementation of Intermodal Services

The last phase of the project will concern the establishment of regular intermodal services. The negotiations with all the different local railways as well as with handling points and shipping lines have nearly been concluded. It remains to up-date the conditions for transport operations with the different partners permanently and to attract enough cargo for the running of trains.

3.2 Training

All scheduled training activities have been completed. Practical training on location in cargo handling and operations as well as in marketing and business development was executed in all states involved, as there are Armenia, Azerbaijan, Georgia in the Caucasus and Kazakhstan, Kyrgystan and Uzbekistan in Central Asia. Due to the lack of local response, it remains to execute training in the port of Turkmenbashi. At a meeting in December in Ashkabat, it was decided to execute this training in the beginning of the year 2000. These activities will not covered by the Project's training budget.

The three study tours – one for marketing and operations personnel from different institutions from the Caucasus, one for the same target group for participants from Central Asia and the last one for representatives of the ministries of transport from all Traceca states – were also executed.

For details see separate report on the different training events.

3.3 Promotion

3.3.1 Web Site

A test web site has been developed and is currently checked by all Consultants. The communication possibilities in the Caucasus and in Central Asia have been evaluated in order to find the most sensible way to make the web site available to all potentially interested parties in the Traceca states as well as in Europe.
See Annex 3 to this report.

3.3.2 Marketing Measures

So far, advertisements for the new service have been placed. Additionally, marketing is being done by the project experts by visiting potential clients in the Traceca states as well as in Europe.

A detailed marketing plan for intermodal services in the Traceca region is currently being developed.

3.4 Legal Matters

The Consultants already concluded individual contracts with different terminals and railways in Central Asia and the Caucasus. Currently, a proposal for formal co-operation or the foundation of a joint company (see also project progress report 1), is being elaborated. At the same time the Consultants check the local legislation in order to ensure the compatibility of any proposal and contract with local laws.

4 Project Progress in the Reporting Period

4.1 Traceca-route: Central Asia and Caucasus, Procedures and Difficulties

4.1.1 General

The transport field in the container business suffers from two imbalances. First, from the trade imbalance between import, export and transit with other countries outside Central Asia. Empty Containers are not repositioned to areas where small but new cargo is ready for shipments in the export range. Because of the lack of empty containers the exporters return to conventional transport modes.

The second imbalance results from the difference of commodities which can be carried in containers. While European export cargoes like engines, machinery, spare parts, finished products, chemicals etc. are mostly containerised, regional export commodities like raw- and semi-finished products, minerals, oil, ore etc. are generally rather bulk cargoes, mostly not suitable for container transport.

Products like agricultural foodstuff, tinned products or cotton for export from Central Asia could be carried in containers, but these commodities are strongly contested by all parties in the transport business and very strongly defended by those companies, which already got transport orders in the past. Newcomers face a real battle against these competitors. The small number of empty containers available locally (mostly belonging to shipping lines) are protected and occupied by international freight forwarders in long term contracts.

Additional difficulties result from following facts:

- changes of laws and regulations at a rate of 3 times a year
- changing of people in charge
- personal interests and unofficial financial demands, as cost factors in the real calculation, must be taken into consideration
- changing tariffs from high to low and back again
- forcing competitors to react immediately to other price levels
- rescuing business contracts with clients which like to work with the new intermodal project, but are put under pressure by third parties to refuse from this business in order to be endangered

The whole transport chain between Central Asian countries and the world market areas encounters transit-procedures of several countries with individual customs regulations and unfortunately with artificial barriers in some of these countries.

4.1.2 Transport conditions for the “Silk Road Express”

The terms of contracts between sellers and buyers of goods define the responsibilities of both parties and who will be the decision maker for transport arrangements. If e.g. the seller will be responsible for all expenses for an export from Western Europe to a job site in a Central Asian country he has the choice of

1. leaving all problems to a freight forwarding company for a total lumpsum package for the whole transport chain or
2. arranging the first part of shipment by himself and later to take an operator (like SilkRoadExpress), to take care about the further transport up to that point where he or his buyer takes over as part of the chain again.

If SRE get orders for routing, SRE will be the decision maker for choosing the shortest or cheapest or safest way. To meet this challenge, a certain number of sub-decisions will take place with the necessity to conclude contracts for additional services besides the main contracts of transport.

For example, the seller decides to go by container vessel and arranges himself the way up to the Port of Poti on free-out-terms. Now the local SRE organisation takes over and on this stage the first step onto the Traceca-route starts. In the Port of Poti the SRE-Team gets the first orders for further arrangements and they also encounter the first difficulties with other players on the Traceca-route:

a) Port handling- and storage fees in Poti (to be paid by SRE) are charged by official tariffs. The port director refuses to grant any special rebates to the Traceca-project!
b) Customs declaration fees (TDF) have to be paid in cash in advance. The charges are extremely high, because only monopolistic agencies are working on this. But TDF is charged per B/L (120 to 130 $), so the same price is valid for 1 or 10 Containers in one allotment.
c) Some shipping lines order the discharged containers immediately into their own private terminals which results in additional charges (the experts have already undertaken actions to avoid this item)
d) SRE-teams have to order the right number of railway platforms, inform all other parties about the further transport way and doing all paperwork, then physical movements start again.
e) The local railway station Poti (responsible for the rail link between the port of Poti and the official Georgian rail line) charges additional fees for marshalling and shunting – according to official tariffs – no rebates are negotiable.
f) Then the freight rates are being paid to Georgian Rail (50 % rebates are granted) and to Azeri Rail (also 50% rebates) up to the local railway station close to Baku.
g) The local railway station Baku (responsible for the rail link between the port of Baku and the official Azeri rail line) charges again additional fees for marshalling and shunting and for transporting the container wagons to the Port of Baku – based on official tariffs by counting the number of wagons per allotment. For single Containers below the allotment of 10 Containers the fee is extremely high.

The Port of Baku is the next point for taking new decisions for the transport to Central Asia. The local experts of SRE are checking the best possibilities to cross the Caspian Sea, as there are:

- RoRo-Ferry to Port of Aktau
- Railway-Ferry to the Port of Turkmenbashi
- Semi-Feeder-Vessel to the Port of Aktau

The THC (Terminal Handling Charge) for serving the ferries is still under negotiation in both ports, the sea freight rates for ferries are not competitive now, but they are also under re-negotiation.
Only the sea freight rates for Semi-Feeder incl. the THC in both ports are fixed now on a reasonable level and by good support from the administrations of both ports.

After discharging in the a.m. ports, again railway freight rates have to be settled. With Kasakh Rail and Uzbek Rail the Consultants concluded already contracts with certain rebates on a reasonable level. With Turkmen Rail and the Port of Turkmenbashi no contracts are existing so far. Negotiations started again in the beginning of December.

As a last item, the delivery between the Uzbek Rail Terminal (contracts are already concluded) to the end receiver including repositioning of empty containers into a depot has to be arranged by a local expert (employed by SRE). But the right depot is not exactly defined for all containers. It depends on the first decision on the seller's side which shipping line or lease company he likes to use. Therefore, the calculation table for

SRE already has to take into consideration these items in case repositioning of containers becomes necessary.

4.2 Caucasus (Armenia, Azerbaijan, Georgia)

Azerbaijan and Georgia
As a result of negotiations with shipping companies, a first depot of empty containers was established in the Port of Baku. This way, some imbalances in repositioning of containers between Poti and Baku can be settled and thus expensive empty container transport on long distances avoided. Due to this fact, key-customers of SRE improved their business with further transport of goods to several destinations in Western Europe, USA and Canada.

For instance, contracts between German companies and Caucasian foodstuff trading companies were extended and enlarged over previous agreements and are expected to result in a transport of approximately 240 containers for Georgia and Azerbaijan.

In Georgia, power plants are currently being rehabilitated. An important contract for the delivery of equipment for two Georgian power plants was signed by SRE, that started at the end of October until and carries through to March next year. The total amount for equipment from Germany will be 800 tonnes, equalling approximately 54 Containers. This power plant equipment has been and continues to be delivered for Georgian destinations to the satisfaction of the customers. Additional cargo from suppliers outside the main contract have been ordered. The additional cargo amounts to approximately another 40 containers, on top of the initial 54 containers, and SRE has prepared an offer for these transports.

Two freight forwarding companies are willing to join operations with SilkRoadExpress in the Caucasian area. Using the empty container depots in Poti and Baku, they will transfer their business from previous joint ventures to the new partnership from 1 January 2000. These contracts will be valid for six months and we expect up to 40 containers per month as export from Azerbaijan to Western Europe plus 25 to 30 containers per month from Georgia to Western and Southern Europe.

Smaller companies already made contacts because of recommendations from other customers with the local representatives of the SilkRoadExpress in Poti, Baku and Tbilisi and ordered first containers to be transported, thereby changing from truck to rail transport.

Armenia
During the last visit to Armenia the Consultants discussed with the Head of the Armenian Railways the transport of containers which was managed and executed by the Armenian railways themselves. The export cargo was organised in shippers-own containers, but services were supplied by a local agency in Poti. The railway freight was calculated jointly by the Armenian and the Georgian railways. For these transports an involvement of SilkRoadExpress was not requested. A similar situation might occur again in future, but the possibilities that this will happen are limited.

- Only <u>one</u> agency with <u>one</u> shipping line behind it can arrange transport to some destinations where only feeder vessels are involved (Black Sea to the Mediterranean Sea).
- Round trips for which the supply of empty containers from or to a depot in Poti is requested cannot be organised by the same agent
- Depot arrangements for the terminal Karmin Blur in Erevan require more connections and contacts to different shipping lines via SilkRoadExpress
- Cross trade outside the Black Sea and the Mediterranean Sea needs more alternatives and competitive rates which can only be managed by a commercial partner like SilkRoadExpress

Presently, the Armenian Railways do not grant rebates on the Traceca route because they agreed already on favourable rates with Georgian Rail. However, the normal transit tariffs are competitive in comparison to other railway tariffs in Georgia and Azerbaijan, even calculating the 50% rebates of these countries. In fact, the one-way freight for a 40’ container amounts to 318.—USD, a price which is similar to the price for the same distances on the other Caucasian railways.

The container terminal Karmin Blur, which was also visited by the Consultants, has been rehabilitated by the terminal on their own account and is now ready for faster and bigger dispatch and handling of containers. The terminal received a new concrete surface for heavy traffic on a length of 320 m. In the beginning of the next year, the new container handling and transport equipment (reachstacker, container – forklift – high-stacker, chassis etc.) purchased by Tacis-Traceca is expected to be delivered. This equipment will partly be transported by the project. The equipment will be dismantled in order to fit into containers.

The shipping of export cargo, e.g. tobacco, in containers to several destinations was offered by SilkRoadExpress. The Armenian side will decide on the offer by end of December.

The Consultants were informed on a new possibility of small scale transport of containers in the Black Sea area: The Ministry of Transport of Armenia has chartered a small vessel for their own use, but that could also be used by SRE. This vessel is able to carry break bulk cargo as well as a certain number of containers.

For future co-operation between the Armenia railways, the terminal Karmin Blur and SilkRoadExpress, the Railway Department offers a joint organisation with office facilities in the Headquarter building of the railways as well as at the terminal Karmin Blur. Contract negotiations will start in January, when the Consultants will visit Yerevan again.

4.3 Central Asia (Turkmenistan, Uzbekistan, Kazakhstan, Tadjikistan, Kyrgystan and Mongolia)

Cargo Potential

The present trading potential between Central Asian countries and European countries cannot exactly be defined. The available statistics are incomplete, outdated or not detailed enough for detailed commercial planning, also the local trading and transport environment is very capricious. Nevertheless, there is a cargo flow of some million tonnes per year in both directions. Concerning intermodal transport, the Consultants have to decide which main items they have to focus on, in relation to real cargo flows and which cargo is available for container traffic, for railway transport and for reasonable conditions according to customers’ requests.

In order to reduce the number of examples and possibilities the Consultant will not consider the commodities and transit ways which are not expected to get a chance in the near future to reach reasonable market levels by containerisation. That is e.g. bulk cargo like oil, grain, coal, minerals, ore, raw steel etc. These are special commodities which have already found their transport modes in the conventional area.

To focus on break bulk cargo only, which is world wide suitable to be stuffed into Containers, reduces the available amount of cargo almost by 80 %. Further, the amount of available cargo has to be reduced by the trade and traffic flows which are created only by bilateral arrangements between two of the CIS-countries, because this cargo has no impact on the Traceca route.

Taking into consideration that political and geographical parameters in some areas build up hindrances which cannot be overcome by the project we have to reduce the number of cargo further.

Last but not least, the Consultants have to consider the established transport arrangements on road-trucking that are managed by Freight Forwarders which belong to big international organisations. They do not care about railway transport or possible containerisation of cargo, if the parent companies continue to the employ their own independent truck operating fleet. They will only take out small parts of their own imbalances if they lead to negative results in their calculation. The level of comparative price-modules are far below realistic market prices.

As a conclusion the main attention of the project will be focussed on a number of containers for all Central Asian countries together of not more than 50.000 TEU per annum in the year of 2000, which the project can realistically reach. But even this number has to be divided into:

- Export and Import from each country of origin to end destinations in countries outside the CIS, and
- Transit cargo which is getting in and out and is itself transit cargo again in the neighbouring countries.

Transit-cargo in this case has of course the biggest interdependency on transport modes, because imbalances of trade only influence the first and the last stage of trading parties. For all other parties involved, the request for empty containers e.g. is already solved. In case a country like Kyrgyzstan is exporting a container to France and will use all possibilities to follow the Traceca-route, this container will cross 7 borders. The consignment is regarded once as export and 7 times as transit cargo. But the biggest problem of all – to get the necessary number of empty containers – is left to the exporting country. The Consultants explain in Annex 1 to this report one example (out of several possibilities) for a whole transport chain between a West-European area (Kent in UK) to Uzbekistan (Tashkent), with all parties and price levels involved

Tariffs

As the initial rate structure which the project calculated and proposed to the customers was not competitive, new tariffs for the intermodal services have been developed and delivered to potential and actual customers. These rates appear to be more competitive than the previous ones.

Uzbekistan

Terminal Contracts

Contracts with the main terminals in Uzbekistan – with Uzvneshtrans and the Uzbek Railways - were concluded and signed by SilkRoadExpress and the local side. These agreed conditions were also accepted by private terminals and will be applied there, too.

Cotton Shipments

A major contract for cotton shipments was negotiated with freight forwarders and cotton warehousing companies in Antwerp. This contract is valid for the cotton shipped for the Swiss trading company Dunavant and the contract will be concluded in early January.

The offered transport rates are competitive on the following transport chain:
Stuffing of the cotton into containers will be done in the Bukhara Cotton Center. From there, the cotton will be transported by the Uzbek railways and the Kazakh railways to the Port of Aktau in Kazakhstan. The containers will then be loaded onto a semi-container ship of Caspian Shipping Company and be shipped to the container terminal of the Port of Baku in Azerbaijan. On-transport will be executed by AzerRail and then by Georgian Railways to the Port of Poti in Georgia. From the Port of Poti the freight forwarder ordered the shipment to Antwerp and delivery into a cotton warehouse there. The empty containers will go into an Antwerp container depot.
The agreements with the Director of the Port of Aktau, the Caspian Shipping Company, the Head of the Bukhara Cotton Center and the supplier of empty containers are concluded.

Negotiations with other cotton traders in Tashkent will – after good results of the first cotton shipments – give the opportunity to take over the business from different warehouses in Uzbekistan to destinations in Italy, France, Spain and the Netherlands. The test shipment will be done by a block train of twenty 40' containers. Due to the fact that tariffs are calculated for wagons respectively containers, and the tariffs are subject to comparison between conventional railway wagons and containers, the amount of cargo to be stuffed into the containers has to be more than the previous average of payload per container. Therefore, in the given case more than 50% of the containers employed will be high cube containers (9' 6''), in order to stuff more cotton bales into one container.

In order to control the stuffing technology and to advise the staff, the Consultants visited the Bukhara Cotton Center mid November.

Estimated timetable for cotton shipments:

• Test shipment:	January 2000	500 – 1500 tonnes
• Regular shipments 1 and 2:	February 2000	2000 tonnes
• Regular shipments 3 and 4:	March/April 2000	4000 tonnes
• Regular shipments 5 and 6:	May/June 2000	4000 tonnes

Potential further shipments for other trading companies and other destinations than Antwerp, also under negotiation, are not included in this estimate.

Kazakhstan

In Kazakhstan the Consultants reached agreements with the Kazakh Railways on rebates on the railway rates. Further, favourable conditions for the handling and storage of containers in the port of Aktau could be reached. As mentioned above, the first containers with cotton will be shipped from Uzbekistan via Kazakhstan and the port of Aktau to the Caucasus.

One problem in Kazakhstan was the frequent change of persons and organisations in charge of container transport. Now the newly established company "Kedentransservice", a daughter company of the Kazakh customs, is in charge of handling of containers in Kazakhstan. They have the full support of the government and therefore are very confident that they will have good business, even on the account of other private freight forwarding companies. On the other hand it is very clear that they so far lack the proper staff needed for running such big operations.
Their field of interest is the following:

- Customs operations (clearance, bonded warehouses, ...)
- Transit (transit documents, guarantees,...)
- Terminal operations
- Rail freight brokerage

"Kedentransservice" is very interested in a closer co-operation with the project, stating that they will certainly sign a contract on <u>terminal operations</u> identical to the one signed in Uzbekistan, but at the same time they insist on the execution of other services like

1. <u>Transit operations</u>: though transit should be covered by simple Railways bills of lading (SMGS), they mention that a "transit document" will have to be issued at the point of entry; this new procedure is about to be established in order to better control transit operations in Kazakhstan. As Kedentransservice is a daughter company of the Kazakh Customs, the Customs fully trust them and they state, that transit operations would be more flexible if SRE use them. Besides, the Kazak Customs <u>will not demand payment of excise taxes</u> at the point of entry for goods such as tobacco or alcoholic beverages (the Kazakh Customs consider that the signature of Kedentransservice is worth a bank guarantee).

2. Rail freight : Kedentranservice has just signed an agreement with the Kazakh Railways and they can act as freight brokers; they can offer the same rebates that we negotiated with the railways; in fact they really insist on this point; they are ready to sign the same agreement as the one between SilkRoadExpress and UZGELDOREXPEDITSIA.

In Almaty there are two main container terminals:

- Almaty 1, which is operated by Kedentranservice. This is a quite well equipped terminal which offers a broad spectrum of services to the clients
- and Almaty 2, operated by the Railways - but this terminal does not have proper equipment, they mainly handle 3 t and 5 t containers as well as 20’ containers

Besides these two terminals there are three other terminals in Almaty plus one warehouse with its own rail-tracks (AKKU - see earlier report). In fact only one of these three can be considered as a possible partner and this is ALAN (the two others are very small and for road transport only).

Alan Terminal :
ALAN is located very close to Almaty 1. Its is a private Russian – Kazakh Joint Venture which operates a terminal consisting of :

- a zone under customs control
- a free zone
- a small warehouse

They have one 42 ton crane (with 20" and 40" spreaders) and two smaller ones. The combined surface is around 40.000 sq. meters. They have no rail tracks at present and they pick up their containers from Almaty 1 (500 m. away); they are about to move to another piece of land serviced by the railways in the same area.
This company is member of FIATA; clearly they are professional freight forwarders.

It is of interest for SilkRoadExpress that they have empty 20' and 40' belonging to shipping lines or leasing companies (HYUNDAI, GENSTAR, MCSC); the majority is apparently from south east Asia (a rough account shows about 100 containers : 40 40-footers and 60 20-footers). The majority of these containers seems to be in good condition.
Their clients have little opportunity to ship them back loaded and could be interested in positioning them to Tashkent or Bukhara provided we drop them off in Antwerp, Rotterdam or Hamburg.

Turkmenistan
The work in Turkmenistan and with Turkmen partners was in the past somewhat difficult. Several attempts had been made to get into contact and to negotiate the basic conditions for intermodal transports, however, with very few concrete results.

In the very beginning of the project the Co-ordinating Unit and Turkmen counterpart, that is the Turkmen Railways, being in charge of the railway transport as well as of terminal operations, had been visited to introduce the Consultants and the objectives of the project.

First negotiations were then led in December 1998 with the Turkmen railways.

One purpose of the visit was to identify clearly the body that would act as counterpart (i.e. have the right to sign agreements) as it seemed that this point was not very clear in Turkmen's minds. The Consultants found out that state authorities had forbidden the Turkmen Railways to sign any agreement with foreign companies.

The Railways were instructed to send the Consultants to Turkment Transport Freight Forwarders for final negotiation and contacts. There, M. Kurbankouli Atabaev, head of TTFF, and his deputy M. Oraz Khoudaiberdiev, led the discussions.

They stressed that they should be considered as project beneficiaries nevertheless; the Consultants explained that their own statutes prevented the project from making such a move as TTFF is only an office, delivering no service and with no operational power.

Nevertheless the message from the authorities was clear and no agreement could be reached but with TTFF.

For operations in Turkmen Railways M. Khalmourad Berdyev was met and the following subjects were discussed:

- General progress of the project in the Caucasus and extension to Central Asia.
- Difficulties with Caspian Shipping Line which is a "state within the state" and shows almost no flexibility.
- TTFF: tariffs are only negotiated under the auspices of TTFF; Railways apply conditions appearing in TTFF contracts and do not grant rebates on their own.

Further discussions were held in May 1999 with Mr. Agajanov, the then newly appointed Head of Railways. As he was only appointed in the end of March, he had very little knowledge about the Traceca Intermodal project. The Consultants introduced the project to him and Mr. Agajanov listened very carefully to the presentation of the project, its background, objectives and immediate needs. One of the problems for the project was that the Turkmen Railways were not willing to apply the "SARAKS Agreement" and Mr. Agajanov seemed to be very concerned by that.

He did not make any definite commitment on the subject of the "SARAKS Agreement", though. He picked up the two draft contracts for further studies. According to his views the railways (and their 100% owned subsidiaries) would be our counterparts for both rail and terminal operations.
In fact it appeared that :

1) he needed to get clearance from his own controlling authority (Cabinet of Ministers)
2) then all practical problems would be passed to problem M. Khalmurat BERDIEV, who was specifically mentioned in the conversation.

After that, a meeting with Mr. Khalmurat Berdyev took place. He stated that

- the Turkmen Railways are willing to start working with a European company (SILKROADEXPRESS); this has always been his thinking; future will tell if the Turkmen Railways intend to participate later in some sort of a joint venture;
- freight prices MUST be agreed upon by their subsidiary TTFF (Turkmen Transport Freight Forwarding); the Railways are not allowed to negotiate tariffs and sign contracts with foreign firms;
- SARAKS agreement: 6 weeks earlier, Mr. Khalikov, Vice Prime Minister, Member of the Cabinet of Ministers in charge of transport, had sent a letter to all foreign Ministers of signatory states in order to advise them that Turkmenistan would stop applying the 50% rebate; this was triggered by the Uzbek position: according to Turkmenistan, Uzbekistan does not apply the 50% rebate to all parties but to selected partners only; due to this situation it was useless to bet on the implementation of the SARAKS Agreement
- a specific rebate for the "Intermodal Service" project should be negotiated but it should not be expected to be in the range of 50% (rather 30% or a little more).
- a letter should be sent to Mr. Khalikov explaining the situation and requesting the best possible rebate;
- for terminals: a specific department of railways is in charge of this kind of services and we should apply to them; this is the Mechanic Division headed by Mr. Seidov.
- last but not least, though Mr. Berdyev could not participate in any commercial negotiation he would stay available for all technical problems.

Further, a meeting with Mr Muhammed Berdyev from the Tacis CU was held, who promised assistance in the solution of the outstanding questions.

Mr. Seidov was then met. He is in charge of terminals located in the western part of Turkmenistan; his colleague is in charge of CHARDJEW and the northern part. He explained that Railway terminals are in charge of the loading, unloading and stacking of containers. Other related services such as delivery or pick-up must be arranged with outside companies.

In the area we are interested in, only Turkmenbashi and Ashkabad (called in fact KULYEVA; 15 km form Ashkabad) can meet our needs; the other terminals are not equipped with cranes lifting 40’ containers and besides, there is no traffic to be expected in remote terminals.

Summary

- As far as our project is concerned, the Railways have no power to negotiate tariffs and conditions;
- Mr. Muhammad Berdyev is motivated and willing to help; he certainly realises that the route through Aktau could be a competitive alternative to the crossing of Turkmenistan resulting in big traffic losses for Turkmen Railways.
- Negotiations should be finalised with Mr. Khalikov.
- If a "special" rebate of approximately 50% is not agreed upon with Turkmenistan we'll have to face a difficult situation when dealing with all other networks along the line.
- In such case, the route through Aktau might be considered a credible alternative.

In the beginning of December 1999 new negotiations were conducted in Turkmenistan. The drafts of previous contract proposals and the minutes of meetings of previous negotiations were taken into consideration, but for the time being, were not accepted by the Cabinet of Ministers. Presently, it is impossible to negotiate tariff rebates on the basis of the MTT or the SARAKS agreement. It is only possible to conclude special individual agreements on a case-by-case basis.
Cargo can mainly be expected for transit, potential clients for local cargo on the Traceca route will most probably be a rare exception. It is doubtful, that the rates on the whole transport route via Turkmenistan are competitive, therefore, most railway cargo is being shipped via Iran, to the Far East via Bandar Abbas, whereas local cargo is being transported by truck. As an example for railway freight rates please find the table below.

Calculation of Cargo Transports via Turkmenistan

Destination	Distance/km	Weight / t	Commodity	Tariff in USD			
				Closed wagon		20’ Container	
				Freight	add. fees	Freight	add. fees
Farat – Turkmenbashi	1163	50	Cotton	1248	60	362	30
Turkmenbashi – Ashgabat	555	50	Equipment	725	60	193	30

Additionally, the Caspian Shipping Company charges very high rates for the transport via the Caspian Sea to Baku. The transport to Western destinations is in the majority managed by Turkish Joint Ventures. Turkmen companies so far avoid the Traceca route for containerised cargo, they are waiting that Tacis will solve all problems with other parties involved.

The Turkmen railways expressed the opinion that they offer already the cheapest rates in comparison with other countries, which in reality is not true. E.g. the tariff per railway kilometre on a 1100 km distance from the Uzbek border to the port of Turkmenbashi, is nearly double as high as the Uzbek or the Kazakh railways charge.

The rail ferry between Turkmenbashi and Baku carries mainly conventional wagons with oil, petro-chemical products and bulk cargo plus some additional trucks from forwarders like Militzer & Münch, Willi Betz, etc. The ferries are sailing 3 to 4 times a week, but are seldom fully booked. If the utilisation is below 50% the ferries frequently wait for another day in order to collect additional cargo. The tariffs for bulk cargo are subsidised as bulk cargo is usually government cargo.

Turkmenistan is aware of its important role as a transit country for its Central Asian neighbours but focuses more on the way through Iran. Azerbaijan is of lesser interest to them, because the Azerbaijan trade gets better access to the Black Sea via Georgia with similar products and also to Turkey as their biggest trade partner and to Iran. Therefore, Turkmenistan regards Azerbaijan more as a competitor than a partner. Most of the official representatives of Turkmenistan do not believe in additional cargo growth by the Traceca corridor, they consider all available cargo to be already in their hands.

Mr. H. Berdyev was surprised by the information that cotton from Uzbekistan will be transported by railway in containers on the Traceca route. But he was aware of the alternative route via Aktau. The Consultant expressed the opinion that in future both transit ways could be used if the tariffs would be on a comparable level. This can only be achieved if all three parties – the Turkmen railways, the port of Turkmenbashi and the Caspian Shipping Company – work together. The present situation demands about 40% reduction on rail, 75% reduction on port charges (for both ferry terminals Turkmenbashi and Baku together) and about 35% reduction of the sea freight rates of Caspian Shipping Company. In that case, the freight rates would be on the same level as the alternative route via Aktau, but then the time savings on the route would be in favour for the route via Turkmenistan (3 to 5 days).

H. Berdyev asked for arguments and suggestions concerning the amount of individual contracted cargo created by an increase of cargo by the activities of SilkRoadExpress. The Consultants will discuss this matter with realistic examples and compare the results.

Following the advice of H. Berdyev, the proceedings for a start of new negotiations of business will be the following:

- SilkRoadExpress will present customer requests with details concerning the transport way, commodities and services required
- Pre-calculations with realistic figures for the whole transport chain will be delivered from the beginning and the end of the chain, with the remaining middle part of the way through Turkmenistan left open
- A new “work group” consisting of all necessary decision makers of Turkmenistan will then calculate and negotiate comparable and competitive items of all their services they can provide in this middle part of the chain.
- To be competitive in comparison to alternative routes (e.g. for transit), individual discounts will be offered – but only case-by-case and not in general
- Additional services will be paid by SilkRoadExpress in the way of “forwarding agents’ commission” on international price standards

In order to get guidelines for the official railway tariffs the Consultant asked for the following:

- Price for the transit way from the Uzbek border to the port of Turkmenbashi for conventional wagons, e.g. for cotton
- Price for the same way into the other direction e.g. for foodstuff
- Prices for Turkmen inland destinations, e.g. Ashgabat, to Turkmenbashi and vice versa
- Tariffs for container transport for the same routes as above in order to compare the prices

Some of the official tariffs see above.

Tadjikistan
For Tadjikistan it was decided to leave it out of project activities due to the very unstable political situation and the current lack of cargo to and from this country.

Kyrgystan
Kyrgyzstan was visited at the very beginning of the project in August 1998 and all relevant project partners, like Mr. Zakirov from the Tacis CU, the Railways, the Terminal at Alamedin and some major clients as well as Customs officials, the Ministry of Foreign Trade and some minor parties such as insurance companies were met.

In Kyrgystan rail operations and terminal operations are both run by the Kyrgyz Railways; the project kept in touch at all times during the project with Mr. Urevitch, who is in charge of freight and who in autumn this year also participated in a study tour to Western Europe.

The main problem in Kyrgystan is that they control only the last short leg from Lugovaia to Bishkek, which is about 120 km of a very long voyage (thousands of km) of the whole Traceca route. in order to keep Kyrgyz rail competitive up to Bishkek, transit rebates must be granted by Kazakhstan and Uzbekistan not to mention the Caucasus. The Consultants have been very actively in this field of negotiating rebates with the result that the Uzbeks as well as the Kazakh railways granted a rebate of minus 50% on the route Chengeldy – Lugovaia and minus 35% for the way Aktau - Lugovaia.

Recently, late November/ early December 1999 the Consultants have visited and reviewed pending problems e.g. the adaptation of the contracts and operations at Alamedin. Further, main customers and partners were visited together with the Railways, e.g. a supplier of concentrated fruit juice was identified and met.

In Paris another meeting took place on December 8 and 9 with Mr. Omorkulov, the head of railways, and Mr. Urevitch to review the present situation. This meeting led to the result that Mr. Omorkulov, will sign SilkRoadExpress' contracts. The main concern of the Kyrgyz railways is the question, when they are going to receive the equipment granted by the EU for the container terminal Alamedin. A new meeting is planned for January/ February 2000.

One remaining problem of the container terminal Alamedin is that the terminal is still not officially opened to 40" container traffic. In order to ship 40’ containers to and from Alamedin special permission must be requested from the Railways. We do have this kind of permission; the real problem is that they badly need the handling equipment to be provided by the E.U. before they can open Alamdin to container traffic without restrictions.

4.4 Foundation of a Legal Entity

So far, the legal conditions to establish an organisation or company have been assessed in the Caucasian countries. The situation in the Central Asian countries is currently being evaluated.

Currently, the project is working on location, especially in the Caucasus with the help of local offices. These offices so far organise the transport of containers in the Caucasus between the Caucasus and West Europe. The office staff is so far limited, in Poti two local experts, in Tbilisi and in Baku one each work on a regular basis for the organisation of transport, including customs clearance and all necessary documentation, and the attraction of new cargo. It is planned to find a new organisational structure for these offices and add personnel in Erevan. The local staff will receive special instructions in marketing to enable them to further actively attract cargo. Additionally, a team of European experts will continue to accompany them in the beginning on location.

The set up of an individual company will not only depend on the legal conditions at the different locations, but also on the perspective of future business. In order to attract further cargo, co-operation agreements with intermodal forwarding agents are being concluded. These agents already have an existing network and are interested in extending the service they can offer to the Caucasus and further to Central Asia. This way, the SilkRoadExpress as well as the international forwarders profit from the co-operation.

The establishment of an independent, commercial entity is only feasible, if it carries out block train operations, i.e. it can despatch whole container trains, once or twice a week on a regular basis. If in future it will only be possible to ship individual containers, a company will not be able to work profitably in the present market and operational environments. Only if local railway station charges in Poti and Baku and transit declaration fees at the Georgian border for individual containers can be avoided, the block train will have competitive market advantages.

4.5 Purchase of Computer Equipment

The Consultants have proposed to purchase the equipment for the different locations in several lots. This proposal was approved by the task manager. The purchase of equipment in different lots has some decisive advantages:

- The procurement procedure is facilitated and thus the equipment can be bought only when it will be necessary and when the proper use of the equipment can be ensured.
- By purchasing the computer equipment locally at the different locations, local support of the equipment and programmes can be ensured.

The computer equipment for the Caucasian states has already been purchased. In Central Asia new offers for the delivery of equipment are currently being obtained, due to the fact that the first enquiry on prices had already taken place in spring 1999 and the conditions for delivery might have changed. It is anticipated that the equipment in Central Asia will be purchased till March 2000.

4.6 Set up of a Training Programme

4.6.1 Objective of the training

The ToR stipulate that especially the ports of Poti, Baku, Turkmenbashi, and Aktau as well as the Bukhara Containerisation Centre and the intermodal terminals Almaty 1 and 2 should receive training in container terminal organisation and management and in business development. The notion of customer orientation and the understanding of interdependencies between the different partners in transport are underdeveloped.
Main topics were to be

- Container handling and operations management
- Management information systems
- Marketing and Promotion activities
- Business development in co-operation with local institutions

These topics should be dealt with in training on location at the different sites.

Further, study tours to different locations were to be carried out. On the one hand visits of the management of the different terminals to each other should be organised, on the other hand, study tours to Western

Europe should be carried out. The objective of this part of the training module was to familiarise the different managers with the facilities and business concepts of the other Traceca ports and terminals and to establish co-operations between each other. The aim of the study tours to Western Europe was to introduce the participants to advanced intermodal and logistical facilities in order to give them some ideas on possible future developments in their home countries. Another aim was to promote commercial contacts between West European transport companies and the ports and terminals.

As the Consultants already explained in the offer they consider the main aim of the training to help to develop a full acceptance of marked oriented structures and of a client-oriented attitude. A major objective of all the training events was to support the establishment of intermodal services and not only the development of the individual ports and terminals.

4.6.2 Selection of organisations to be trained

Initially it was foreseen to train only the management of the ports in the region as well as the personnel of the container terminals Almaty 1 and 2. During the visits of the Consultants on location it appeared, though, that a major deficiency lies not only in management and organisation of the individual terminals but in a lack of co-operation between the different organisations involved in transport as railways, customs, terminals etc. Not only that the co-operation is partly inefficiently organised, but there exists also a lack of understanding of the tasks needs of the other. Therefore, the Consultants decided to execute three different types of training events:

- Training on location for ports and inland container terminals: Here only participants from one organisation were invited to the training. The topics mainly concerned terminal organisation and management and business development
- Training in marketing and business development on two central locations – one in Georgia for participants from the Caucasian states and one in Uzbekistan for participants from Central Asia. For this training participants from different transport related institutions were invited. From ports and inland container terminals as well as from customs and from the different railways.
- Study tours to Western Europe: It was decided to execute the following study tours:
    - one for participants from Caucasus, from the ports of Poti and Baku, from the inland container terminal Karmin Blur in Erevan, from the Georgian, the Azerbaijan and the Armenian railways and for representatives from customs from all three states.
    - One for the same target group from Central Asian states
    - One for representatives of all Ministries of Transport involved in Traceca, except of Tadjikistan.

It proved to be a difficult process to determine relevant participants for the training, due to frequent changes in the partner organisations and a high fluctuation of personnel. Therefore, and in order to ensure an effective training with sustainable results, it took some time to set up the training programme. The same difficulties explained above in point 2.e. apply also for the selection of proper institutions and participants.

In comparison to the ToR more locations have been selected for the training on location than initially foreseen. These locations, as e.g. the container terminal in Erevan, in Bishkek in Chimkent etc. were included into the training in order to ensure in future smooth intermodal transportation procedures, since all of the selected terminal can play a role as a potential partner in realising intermodal transports.

4.6.3 Execution of the training

The formal training programme within the project was completed by the end of the year except for the training in the port of Turkmenbashi. The training had been split into training on location for the different container terminals in Georgia, Azerbaijan, Armenia, Kazakhstan, Turkmenistan and Kyrgystan. This training was on the one hand concerned with practical operations and handling of containers and equipment, on the other hand with topics related to marketing and business development. For details, please see the separate training report.

Further, two centralised training events, one for participants from the Caucasian states and one for participants from Central Asian, was conducted. In this training the topic was marketing and business development.

The third part of the training concerned the execution of study tours to Western Europe. For details of each of the different training events, please see the separate report on training.

It was decided not to carry out study tours to the different ports and terminals of the Traceca states so that the participants get acquainted with the conditions of the other ports, but instead to invite them only to tours to Europe. In the ports and terminals of the Traceca states the conditions and facilities are rather similar to each other, thus, the participants would not really learn something new about management, organisation and operations. Therefore, it was decided rather to familiarise the participants with advanced procedures and operations in order to show them how efficient transport procedures work.
Also, it was found, as already stated above that the participants had a fairly limited understanding of the functions and needs of other partners involved in the transport process. Therefore, participants from different organisations were invited to the same study tour, in order to enhance communication between the different institutions and thus to facilitate future co-operation. In general, the participants appreciated this approach. For details please see the training report.

5 Planning for the whole Duration of the Project

5.1 Implementation of Intermodal Services

The Consultants will continue to negotiate favourable rates with the different local railways and terminals in order to ensure the compatibility of the intermodal service. Further, clients will be met and cargo attracted for the SilkRoadExpress. The implementation of services has already started, but cargoes for a regular provision of services must still be continuously attracted.

Technically, the execution of the services is at least in the Caucasus no problem any more. The local offices do a very professional and efficient job in the organisation of the transport, customs clearance and the assistance to the clients in the necessary documentation. Even additional services like stripping and stuffing of containers, the provision of empty containers, cleaning of containers can be offered and have already been executed. Also, transports to and from the final customer can be offered and are already being carried out.

All these activities will continue in the next months of the project. Further, a decision on the establishment of a legal entity will be taken and realised.

5.2 Training

All training activities with the exception of training on location in the port of Turkmenbashi have been completed. So far, it had proved to be very difficult to get positive reactions for training from the Turkmen side. Despite repeated attempts to invite Turkmen experts to training events either in Uzbekistan or in West Europe the Turkmen authorities had neither given any reply to invitations nor did they even acknowledge their receipt. The Consultants discussed the possibility to execute training in the port Turkmenbashi again in December with the relevant authorities in Ashgabat and this time found a positive reaction to the training proposal. If Turkmenistan will avail itself to training, this training will be carried out at end of January / beginning of February 2000.

5.3 Marketing

A marketing budget has been submitted, the Consultants still wait for approval from the task manager.
A marketing plan for the implementation of intermodal services on the Traceca route is currently being elaborated and will be finalised in the beginning of the year 2000.

5.4 Web Site

The communication requirements as well as the situation on location in the Traceca states have been investigated. The web site is currently being developed and is expected to be implemented by spring 2000.

5.5 Purchase of Computer Equipment

As explained above, it remains to procure computer equipment for the Central Asian locations. This will be finalised by spring 2000.

5.6 Legal Matters

The conditions to establish a legal entity are currently being assessed and a possible organisation form is being discussed.

6 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: **July 1999 – June 2000**	Prepared on : **31 December 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	10 days	4 days	10 days	4 days	56 days	8 days	9 days	34 days
Business Development Expert 2	100 days	15 days	66 days	21 days	81 days	28 days	277 days	44 days	-177 days	-29 days
Rail Operations Expert	59 days	8 days	8 days	5 days	8 days	5 days	26 days	14 days	33 days	-6 days
Railway Expert	46 days	10 days	3 days	0 days	3 days	0 days	46 days	10 days	0 days	0 days
Freight Forwarding Expert	25 days	17 days	0 days	10 days	0 days	8 days	0 days	17 days	25 days	0 days
Intermodal Operations Expert.	22 days	2 days	days	days	days	days	days	days	days	days
Marketing Expert	84 days	10 days	days	days	days	days	days	days	days	days
Railway Marketing + Finance Ex	20 days	4 days	days	days	days	days	days	days	days	days
Tariffs Expert	24 days	2 days	days	days	days	days	days	days	days	days
Legal Expert	69 days	10 days	days	days	days	days	days	days	days	days
Market Analyst	30 days	12 days	days	days	days	days	days	days	days	days
Exp. MIS + Cost Accounting	45 days	5 days	days	days	days	days	days	days	days	days
Financial Expert	25 days	9 days	days	days	days	days	days	days	days	days
Project Database Expert	20 days	0 days	days	days	days	days	days	days	days	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	21 days	20 days	40 days	39 days	110 days	11 days
Project Director + Backstopper	44 days	21 days	11 days	0 days	11 days	10 days	33 days	37 days	11 days	-16 days
Project Co-director	130 days	76 days	days	days	days	days	days	days	days	days
Lecturer / Training	202 day	90 days	146 days	90 days	135 days	90 days	196 days	90 days	6 days	0 days
Sub-total	**1148 days**	**351 days**	**274 days**	**145 days**	**269 days**	**165 days**	**694 days**	**259 days**	**21 days**	**-6 days**
Local Experts	1500 days		160 days		152 days		1436 days		64 days	
Sub total	**1500 days**		**160 days**		**152 days**		**1436 days**		**64 days**	
Interpreter	815 days		300 days		283 days		696 days		119 days	
Interpreter (Conference)	60		60		42 days		42		18 days	
Sub-total	**875 days**		**360 days**		**325 days**		**738 days**		**137 days**	
TOTAL	**3559 days**		**days**		**days**		**days**		**days**	

7 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 **: June 1999 – June 2000**	Prepared on : **31 December 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	-10		
• Standard transport contracts are elaborated	0		• Terminals and railways agree to make realistic co-operation proposals
• A marketing plan for the pilot extension is developed	-20	Marketing plan almost completed	
• National and regional multi-modal agencies are established.	-80	Contacts to Agencies are established	
• A financial plan is established	-10	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, Turkmeni-stan, Kazakhstan, Tadzhikistan, Kyrgistan, Uzbekistan	Page :
Planning period **: July 1999 – June 2000**	Prepared on :**31 December 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	• Equipment for Caucasus has been purchased • Offers for Central Asia are being evaluated	
• A Traceca intermodal services information system, suitable for present needs, is existing	-30	Under elaboration	
Module B1 - Training Interventions			• Suitable trainees are made available and ex-empted from daily work for the training periods on location and in Europe
• Training in container and intermodal cargo handling is conducted	0	Courses are completed (except for Turkmenbashi)	
• Tailor-made training courses are designed and conducted	0	Courses are completed	
Module B2 – Study Tours			
• Study tours to foster business development are exe-cuted	0	Study tours are completed	

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

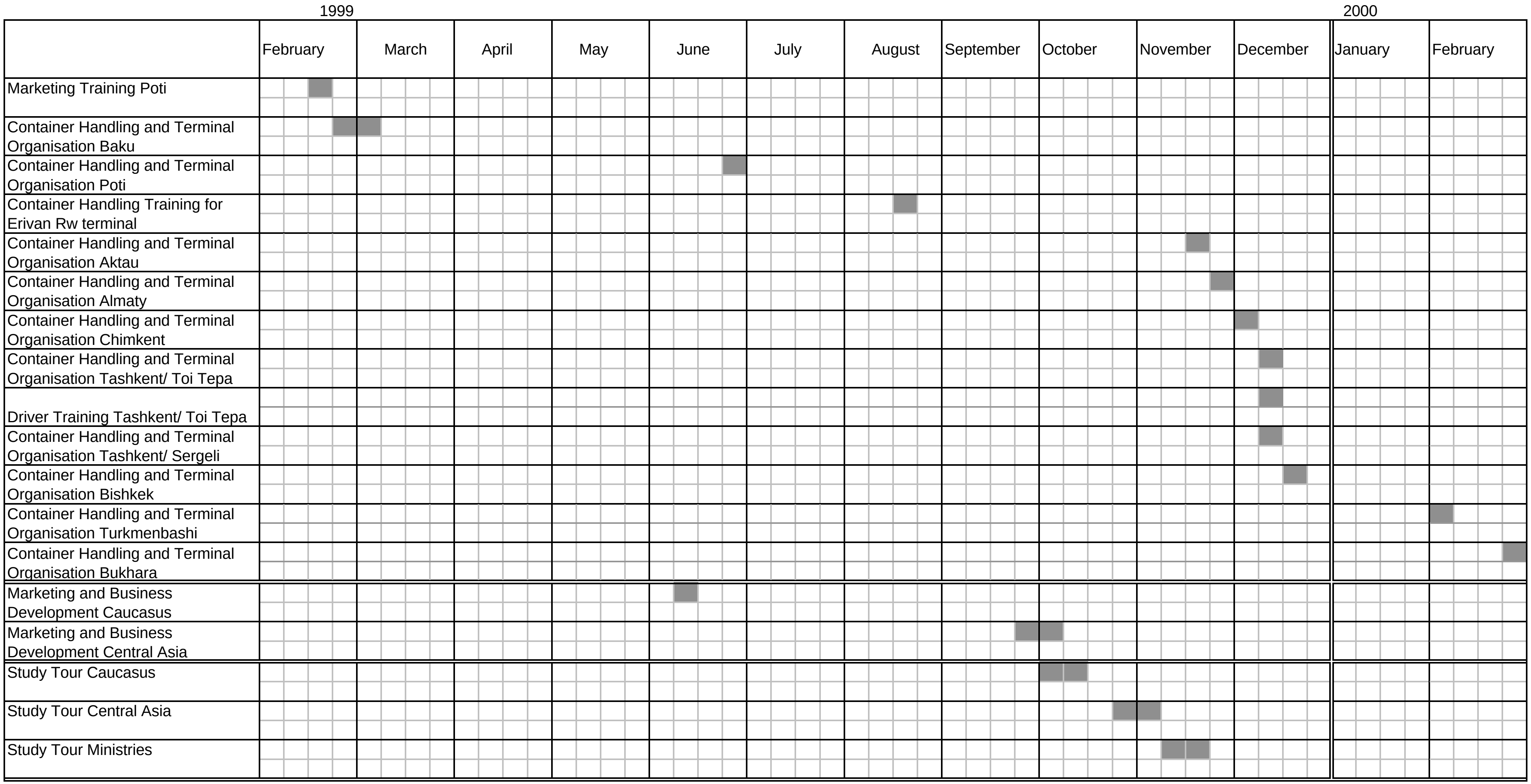
Project title : **Traceca** Intermodal Services	Project number : **TNLREG 9702**	Country : Ukraine, Georgia, Armenia, Azerbaijan, Turkmenistan, Kazakhstan, Tadzhikistan, Kyrgistan, Uzbekistan	Page :
Planning period : **July 1999 – June 2000**	Prepared on : 31 December 1999	EC Consultant : **Polzug – Axis – HPTI Consortium.**	
Project objectives :			

		TIME FRAME													INPUTS	
		1999 (months)						2000 (months)								OTHER
No	ACTIVITIES	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June		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	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	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		64 weeks	
2	Design actual system, subcontracting and testing (MIS)					xxxx	xxxx	xx	xxx						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	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June		EC Consultant	
4	Conduct training in design and place-ment of publicity material						xxxx		xxxx	xxxx	xxxx					
5	Conduct training measures to support the implementation of intermodal pilot extensions				xx	xxxx	xx	xxxx	xx	xxxx	xxxx				22 weeks	
B2	Execute study tours to western Europe			xxxx	xxxx	xxxx									17 weeks	
																48 Flights
													TOTAL		128 weeks	

9 Project Activities

Formal Training Events



Annex 1

Calculation of Transport Costs

Calculation of Transport Costs

1. Example of one possible transport chain for a 20' container from Kent in the United Kingdom to Uzbekistan

Estimated Costs:

In USD per Container	Transport Mode and Party involved		Type of Expense
50.--	Supplier's warehouse	Supplier of empty container	Drop-off depot
100.--	Trucking to stuffing centre of exporting country		Trucking costs
200.--	Stuffing of container		Stuffing fees
150.--	Transport to Port of Shipment		Trucking costs
200.--	Loading onto main vessel		THC
1,500.--	Seaway to Mediterranean port (e.g. Piraeus) Delivery from main vessel to feeder vessel On-carriage Piraeus – Poti		Sea freight rate (THC and on-carriage for Feeder vessels are normally included into the main rates)
120.--	Discharging from Feeder onto railcar in Port of Poti		THC for handling
30.--	Paperwork in the port (B/L and Railway B/L)		Agent's fee
140.--	Transit declaration, customs procedure		Transit declaration fee
50.--	Shunting by local railway station		Railway fees
180.--	Railway freight from Poti to Azeri border (Georgian RW)		Railway freight
250.--	Railway freight Georgian border to Baku station (Azerrail)		Railway freight
60.--	Local Railway station, shunting off and distribution		Railway fees
60.--	Baku container terminal / ferry terminal		THC
50.--	paperwork for further shipment, customs		Agency fee
400.--	Caspian Shipping Company Baku - Aktau		Sea freight rate
120.--	Port of Aktau, discharging ferry to railway platform		THC
40.--	Paperwork and customs procedures		Agency fee
130.--	Railway freight from Aktau to Uzbek border		Railway freight
220.--	Railway freight from Kazakh border to Tashkent		Railway freight
45.--	Terminal handling of container from train to truck		Handling charge
100.--	Trucking of containers to receiver's warehouse (receiver is stripping the containers himself)		Trucking costs
100.--	Trucking of empty containers to depot of carrier choice		Trucking costs
40.--	Depots handles the container into the stack		Drop-in fee
	Empty container is on stand-by for export cargo if no repositioning is required		

In total: a minimum of 24 different parties/ items/ charges/ contracts are necessary for one ordinary one-way-Container-traffic!

The rough estimation is fictive, but similar to realistic figures, and amounts to a total cost of 4,335.-- USD without counting overheads or profits for the operator of the whole transportation chain. If these items shall be covered by administration units in local subsidiaries by app. 5% of the whole transportation costs for overhead expenses the market price amounts to a level of 4,600.-- USD for one 20' Container or 7,360.-- USD for one 40' Container (1,6 times-equivalent factor 20' /40')

The estimated transit time from the first place of shipment to the receiver's warehouse is about 33 – 35 days.

2. Alternative ways by suppliers' decisions: (example only)

In a first step the container with the cargo is transported by truck from Kent to Port of Hull, then loaded onto RoRo-Ferry going from Hull – to Port of Hamburg.
In Hamburg the container is discharged onto the railway, transported by Polzug-Blocktrain via Poland and Ukraine to Odessa (port of Illychevsk), then by Railway-Ferry from Illychevsk to Poti.

From Poti onwards same route like example 1.

If this route is taken the total expenses are about 200.-- USD higher than in the basic version, but time savings are app. 8-to-10 days. The expenses might be reduced by 200.-- USD, if the running negotiations with UkrFerry Shipping Line comes to a final result, close to our counter-proposal for competitive freight rates.

3. Alternative way Nr. 3:

Instead of the route Baku – Aktau the supplier can choose the Railway-Ferry Baku – Turkmenbashi and further transportation by Rail Turkmenistan to Uzbekistan.
By this route the expenses are presently 200.-- USD higher than alternative 2, but the time savings are again 3 to 4 days. The expenses might be reduced, if negotiations with Caspian Shipping Ferry and Turkmen Rail follows our counter-proposals and lowers their rates by 250.—USD.

4. Alternative way No. 4, starting in Ukraine:

The container can also be transported by Blocktrain via Poland and Ukraine, than use the Russian Railway-network via Kasakh Rail to Uzbekistan.

This is of course not the Traceca-Route but the most competitive way where most of the conventional cargo and the majority of Containers are transported.
The expenses are due to the very cheap Russian rail freight rates app. 750.-- USD lower than alternative No. 1, the time savings are the same like alternative 2.

5. Alternative way

If the supplier wants to have only one party involved in the whole transportation chain, and uses from supplier's warehouse up to the end destination only trucks.

Rough description of the chain:
Transport of the container from Kent with a British Ferry from Ports in the South of England (several possibilities 20 times per day to European Continent, e.g. Oostende, Hoek van Holland, Bologne, Calais, Antwerp, Rotterdam etc).
The container can then be trucked in transit (different routes) through East Europe, alternatively by Ferry-Services crossing the Black Sea (Bulgaria, Romania, Ukraine) or in total through Russia and Kasakhstan.

The expenses are more or less the same like in Alternative 1, but time savings are about 12 to 14 days and paperwork is less complicated (avoiding 23 parties involved). The only advantage of the Traceca-Route is that the Russian route is more dangerous regarding damage or loss and a lot of customers refrain from taking the route via Russia due to bad experiences..

Annex 2

Contracts

Contracts on Container Transports

1. Caucasus

Country		Commodity	Relation	TEU
Georgia				
	Export	Fruit Juice Concentrate	Germany	70
		Chemicals	Belgium	4
	Import	Groceries	Ukraine	2
			Poland	2
		Machinery parts	Germany	4
		Electro-mechanical parts and plant equipment	Germany Turkey Italy	34
Armenia				
	Export	Timber	Greece	3
		Timber	United Emirates	30
		Tobacco	Ukraine	20
	Import	Groceries	Greece	2
		Railway equipment	Germany	8
Azerbaijan				
	Export	Fruit Juice Concentrate	Germany	67
		Aluminium	USA	2
		Chemicals	Ukraine	4
		Steel scrap	England	2
		Canned food	Israel	4
			USA	4
	Import	Machinery	Germany	6
		Off-shore equipment	The Netherlands	4
		- "-	Austria	2
		Glass	Poland	2
			Total	**276**

Expected Cargo under Negotiation

Country	Commodity	Relation	TEU
Uzbekistan	Cotton Export	Belgium Italy France	200
	Foodstuff Import	UK	40
Azerbaijan, Baku	Establishment of a empty container depot in the Port of Baku		30
	Project Cargo Import		14
Georgia	Project Cargo Import		60

Annex 3

Preconditions for the Implementation of a Web-site in the Caucasus and in Central Asia

Hosting and updating of a Web service for tracking containers on the Traceca line

The available accesses to the Internet in Georgia, Azerbaijan and Uzbekistan

Mission report - Tbilisi, Baku and Tashkent - November 1999

Contents

1 Purposes of the Mission

As part of the plan to create a Web service enabling freight forwarders and shippers to track their containers along the Traceca line, the technical conditions for the Internet accesses are obviously of utmost importance. Taking them into consideration enables to set :

- the hosting place of the Web service
- the connection modes from the field (stations, terminals, borders) in order to update the data base following the container traffic
- the updating process of data base

2 Local Technical Resources

2.1 Connections with Backbones

All the countries in the Caucasus and Central Asia are connected to the Internet by satellites. Optical cable links are very rare. The Trans-Asia-Europe project – a cable linking Shanghai to Frankfort – seems to be stopped in the whole Caucasus and goes round Iran and Turkey. So the Tacis project – an optical cable along the Traceca railroad – will respond to a real need.
Satellites are very useful if the telecommunication infrastructure on the ground is non-existent or inadequate. But at present, the use of satellites involves idle periods which are well known during intercontinental telephone conversations. Diagrams in Annex A show this effect. In the three cases studied (Tbilisi, Baku and Tashkent), the supplementary delay adds 1 or 2 seconds.
The asynchronous services – like e-mail or file transfer – make the best of this limiting factor, which is a relevant solution. On the other hand, for Web services, this solution does not provide the currently required quality. There are two reasons :

- The Web protocol needs, for a simple page, many exchanges between the host and the browser. A supplementary delay of 1 or 2 seconds for each exchange grows rapidly laborious.
- Contrary to what happens with asynchronous services, the user is waiting behind his display. But, because of the quality of links available in the West, users become demanding.

2.2 Public Switched Telephone Networks (PSTN)

In the three inspected countries, public switched telephone networks are often criticised by users: poor quality lines, frequent breakdowns and even, in some cases, telephone network slowing the transmission rate down to 28,8 Kbs. According to the operators, the bad state of these networks is due to the free local telephone calls, which means not enough turnover to invest in necessary works.

However, digitising of networks has begun and will develop with private capital. Quality of links can be improved through different solutions: new lines on a digital network, old lines "re-negotiated", “buying” a telephone number relocated from a better area, etc.
In this sector, there is no doubt that the situation will evolve in a fast and heterogeneous way. In order to get the best services, it will be necessary to keep a close eye on it,.

2.3 Cellular Telephone

Because of the poor quality of conventional switched networks, the cellular telephone markets grow. American, Japanese and French companies contribute to its rapid growth.

Most of the economic activity areas are already equipped with cellular phone connections. Users do not express any particular criticism about the services quality.

2.4 Internet service Providers (ISP)

All the services expected from an ISP are available in the capitals: PSTN or GSM access, dedicated lines. From a few areas it is not possible to be connected for a local price rate (border Uzbekistan-Turkmenistan).
In spite of connection difficulties to the backbones or PSTN difficulties, it has been quite easy to find proper services.

Hoping to control the Internet, the governments compel ISP to licensing procedures or create their own ISP agencies. As a result, the market is protected and, in contrary to what happens in the West, rates are still compatible with financial balance of the service providers. It will be advisable to monitor to this point closely because, if the rates were raised, it could change the choice of an ISP.

2.5 Electricity

In Azerbaijan and in Uzbekistan power cuts are not infrequent, but they rarely take a long time in the great urban centres. This will not evolve as fast as telephone services because of heaviness of the infrastructures and because of restricted competition.
It is much more difficult in Georgia, except in special area (hospital, Civil Service). Even such a town as Tbilisi has a very poor power supply (10 hours per day only, 5 in the morning and 5 in the evening).

3 Recommendations

3.1 Hosting of the Web site

The rates, and above all the response times of the Internet network in the West, allow Web sites designers to enrich theirs works with many graphic effects. On the other hand, users are used to quickness and graphic richness. At present, satellite links cannot supports such performances. So, in order not to disappoint customers expectations, it would be useful to choose a Web hosting in the West.

At first glance, it might seem that such a choice makes updating container data bases more difficult for Traceca stations and terminals. But in fact, if the host was located in a Traceca state, only the country hosting the site would benefit from it. All other countries would remain in the same position, that is to say, linked to the Internet by satellite.

Web site hosting in the West guarantees to the customers an undeniable advantage.

3.2 Connection Methods

From the field (stations, terminals, borders), data bases' updating will need only a few connections per week, for a few minutes each. Those up-datings would have to be done very regularly but, in case of difficulty or breakdown, a 2 or 3 hours' delay would not have any serious consequences.
Dial up PTSN connections would be convenient, even restricted to 28.8 Kbs rate.
Reasonably good telephone lines can be obtained in most of cases. If not, it will be necessary to get an intervention of the ISP with the local operator.

In a few exceptional cases, it could be necessary to change (or to double) PTSN for GSM. This solution enables to bypass the unavailability or poor quality of lines, but it is more expensive and it supports a 9.6 Kbs restricted rate only. This low rate, however, is enough for updating work.

Most offices in the field are (or will be soon) served by one or several local ISP. If not, it would be sufficient to make temporary use of long-distance calls or GSM. In each country, one or two ISP dominate their sector. So, the choice is quite easy. In fact, this choice is not so important since it can be changed without any difficulty. We have to remember that it would be useful to entrust the ISP to get from the operator a good quality telephone line and to recommend a modem making the best of the local technical context.

About power supply, the simple safety measures already taken at the Consultant's offices are sufficient :

- UPS, (possibly a little bit too strong to increase the battery life)
- voltage smoother

In Georgia, except for a fortunate field of exploitation safe of power cuts, a small generating unit is now essential.

3.3 Up-dating process

As a conclusion, Web access is already possible from most of the fields of exploitation, in reasonably good but minimum conditions. This situation should improve rapidly.

Therefore, it is possible to install an updating Web service. Simple e-mails or file transfers would make more proper use of available connectivity, but they would not enable, as the Web would do, to control on line the right keyboarding. This point is essential to improve the reliability of the information sent to the consumers. It will be just necessary to take care to the Web page sizes forming the service. Any graphic element which is not technically essential would be redundant.

Anyway, people in charge of updating will inevitably have difficulties with connections. Then they will have to be able to find the cause: poor telephone link, modem out of configuration, ISP's breakdown, satellite's breakdown, etc. A training course of a few days would be helpful.

Annexes

Annex A : Ping

Ping to Tbilisi

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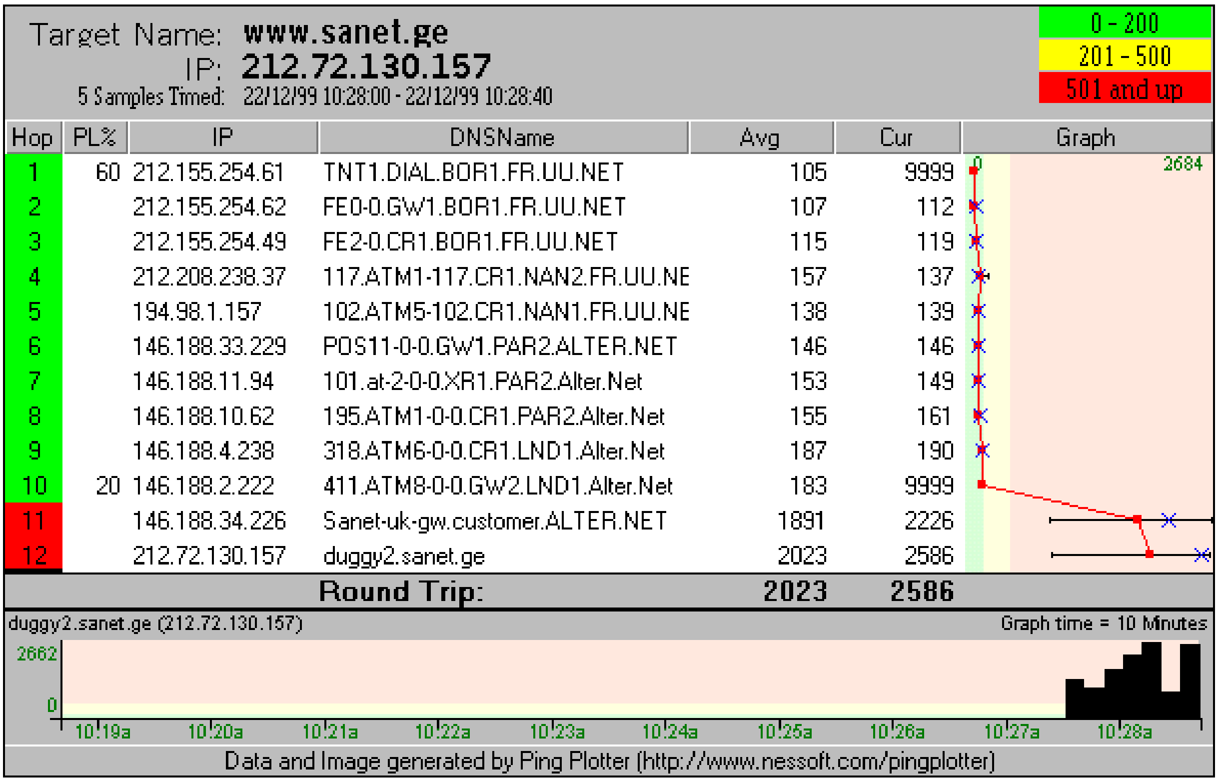

Target Name: www.sanet.ge
IP: 212.72.130.157
5 Samples Timed: 22/12/99 10:28:00 - 22/12/99 10:28:40

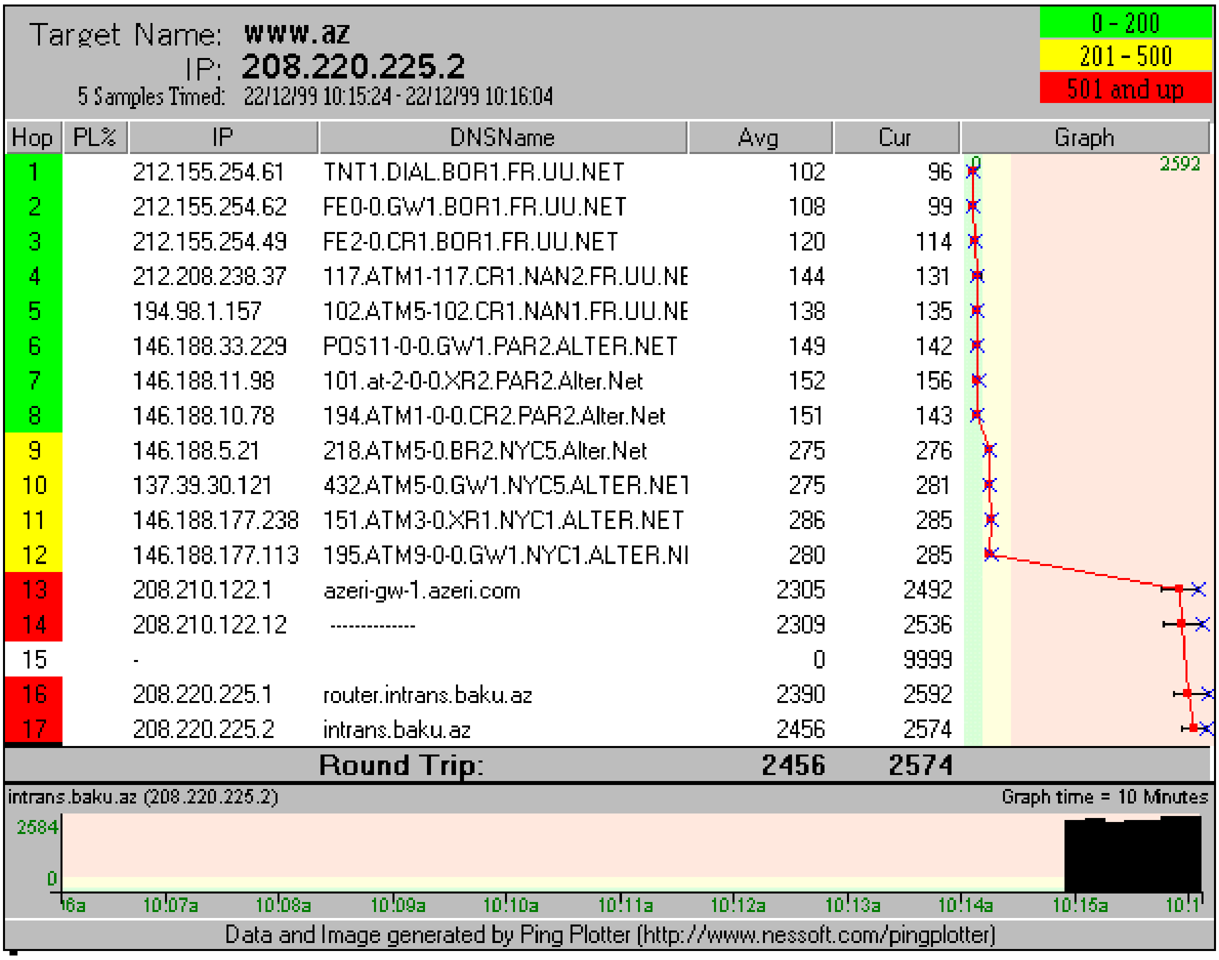
0 - 200
201 - 500
501 and up

Hop	PL%	IP	DNSName	Avg	Cur	Graph
1	60	212.155.254.61	TNT1.DIAL.BOR1.FR.UU.NET	105	9999	
2		212.155.254.62	FE0-0.GW1.BOR1.FR.UU.NET	107	112	
3		212.155.254.49	FE2-0.CR1.BOR1.FR.UU.NET	115	119	
4		212.208.238.37	117.ATM1-117.CR1.NAN2.FR.UU.NE	157	137	
5		194.98.1.157	102.ATM5-102.CR1.NAN1.FR.UU.NE	138	139	
6		146.188.33.229	POS11-0-0.GW1.PAR2.ALTER.NET	146	146	
7		146.188.11.94	101.at-2-0-0.XR1.PAR2.Alter.Net	153	149	
8		146.188.10.62	195.ATM1-0-0.CR1.PAR2.Alter.Net	155	161	
9		146.188.4.238	318.ATM6-0-0.CR1.LND1.Alter.Net	187	190	
10	20	146.188.2.222	411.ATM8-0-0.GW2.LND1.Alter.Net	183	9999	
11		146.188.34.226	Sanet-uk-gw.customer.ALTER.NET	1891	2226	
12		212.72.130.157	duggy2.sanet.ge	2023	2586	
			Round Trip:	2023	2586	

Data and Image generated by Ping Plotter (http://www.nessoft.com/pingplotter)

▪

Ping to Baku



Target Name: www.az
IP: 208.220.225.2
5 Samples Timed: 22/12/99 10:15:24 - 22/12/99 10:16:04

0 - 200
201 - 500
501 and up

Hop	PL%	IP	DNSName	Avg	Cur	Graph
1		212.155.254.61	TNT1.DIAL.BOR1.FR.UU.NET	102	96	2592
2		212.155.254.62	FE0-0.GW1.BOR1.FR.UU.NET	108	99	
3		212.155.254.49	FE2-0.CR1.BOR1.FR.UU.NET	120	114	
4		212.208.238.37	117.ATM1-117.CR1.NAN2.FR.UU.NE	144	131	
5		194.98.1.157	102.ATM5-102.CR1.NAN1.FR.UU.NE	138	135	
6		146.188.33.229	POS11-0-0.GW1.PAR2.ALTER.NET	149	142	
7		146.188.11.98	101.at-2-0-0.XR2.PAR2.Alter.Net	152	156	
8		146.188.10.78	194.ATM1-0-0.CR2.PAR2.Alter.Net	151	143	
9		146.188.5.21	218.ATM5-0.BR2.NYC5.Alter.Net	275	276	
10		137.39.30.121	432.ATM5-0.GW1.NYC5.ALTER.NET	275	281	
11		146.188.177.238	151.ATM3-0.XR1.NYC1.ALTER.NET	286	285	
12		146.188.177.113	195.ATM9-0-0.GW1.NYC1.ALTER.NI	280	285	
13		208.210.122.1	azeri-gw-1.azeri.com	2305	2492	
14		208.210.122.12	-------------	2309	2536	
15		-		0	9999	
16		208.220.225.1	router.intrans.baku.az	2390	2592	
17		208.220.225.2	intrans.baku.az	2456	2574	
			Round Trip:	**2456**	**2574**	

intrans.baku.az (208.220.225.2) Graph time = 10 Minutes

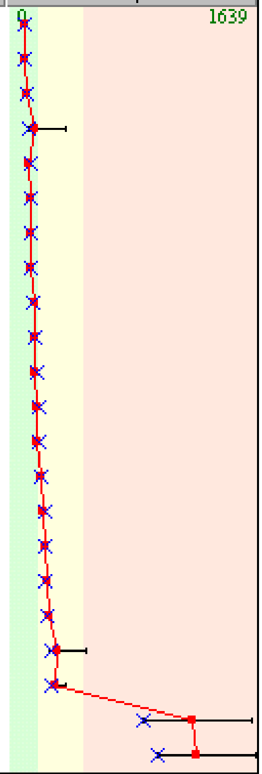
2584
0
6a 10:07a 10:08a 10:09a 10:10a 10:11a 10:12a 10:13a 10:14a 10:15a 10:1

Data and Image generated by Ping Plotter (http://www.nessoft.com/pingplotter)

Ping to Tashkent

Target Name: **www.eastlink.uz**
IP: **194.220.214.2**
5 Samples Timed: 22/12/99 10:23:43 - 22/12/99 10:24:23

0 - 200
201 - 500
501 and up

Hop	PL%	IP	DNSName	Avg	Cur	Graph
1	40	212.155.254.61	TNT1.DIAL.BOR1.FR.UU.NET	99	98	
2		212.155.254.62	FE0-0.GW1.BOR1.FR.UU.NET	102	101	
3		212.155.254.49	FE2-0.CR1.BOR1.FR.UU.NET	110	117	
4		212.208.238.37	117.ATM1-117.CR1.NAN2.FR.UU.NE	176	133	
5		194.98.1.157	102.ATM5-102.CR1.NAN1.FR.UU.NE	132	138	
6		146.188.33.229	POS11-0-0.GW1.PAR2.ALTER.NET	137	144	
7		146.188.11.98	101.at-2-0-0.XR2.PAR2.Alter.Net	149	148	
8		146.188.10.53	SO-1-0-0.TR2.PAR2.Alter.Net	146	137	
9		146.188.10.141	SO-6-0-0.TR2.FFT1.Alter.Net	167	161	
10		146.188.8.145	SO-6-0-0.XR2.FFT1.Alter.Net	172	171	
11		146.188.11.169	194.ATM1-0-0.BR1.FFT1.Alter.Net	177	186	
12		195.198.3.97	-------------	187	192	
13		195.198.3.69	-------------	189	197	
14		195.198.3.74	-------------	212	213	
15		194.17.1.165	sto-b1-pos0-1.telia.net	228	238	
16		194.17.1.106	ov-i8-atm1-0-1.telia.net	238	245	
17		194.17.1.14	-------------	252	235	
18		194.17.1.26	-------------	265	259	
19		193.124.254.246	pvc-11-67.ATM-1-0.RASCOM-1.relcor	324	286	
20		193.125.152.16	MSK-KIAE-6.Relcom.EU.net	302	277	
21		193.124.178.61	elink-1-KIAE-6-s3.ll4.relcom.ru	1221	899	
22		194.220.214.2	dev.eastlink.uz	1254	994	
			Round Trip:	**1254**	**994**	

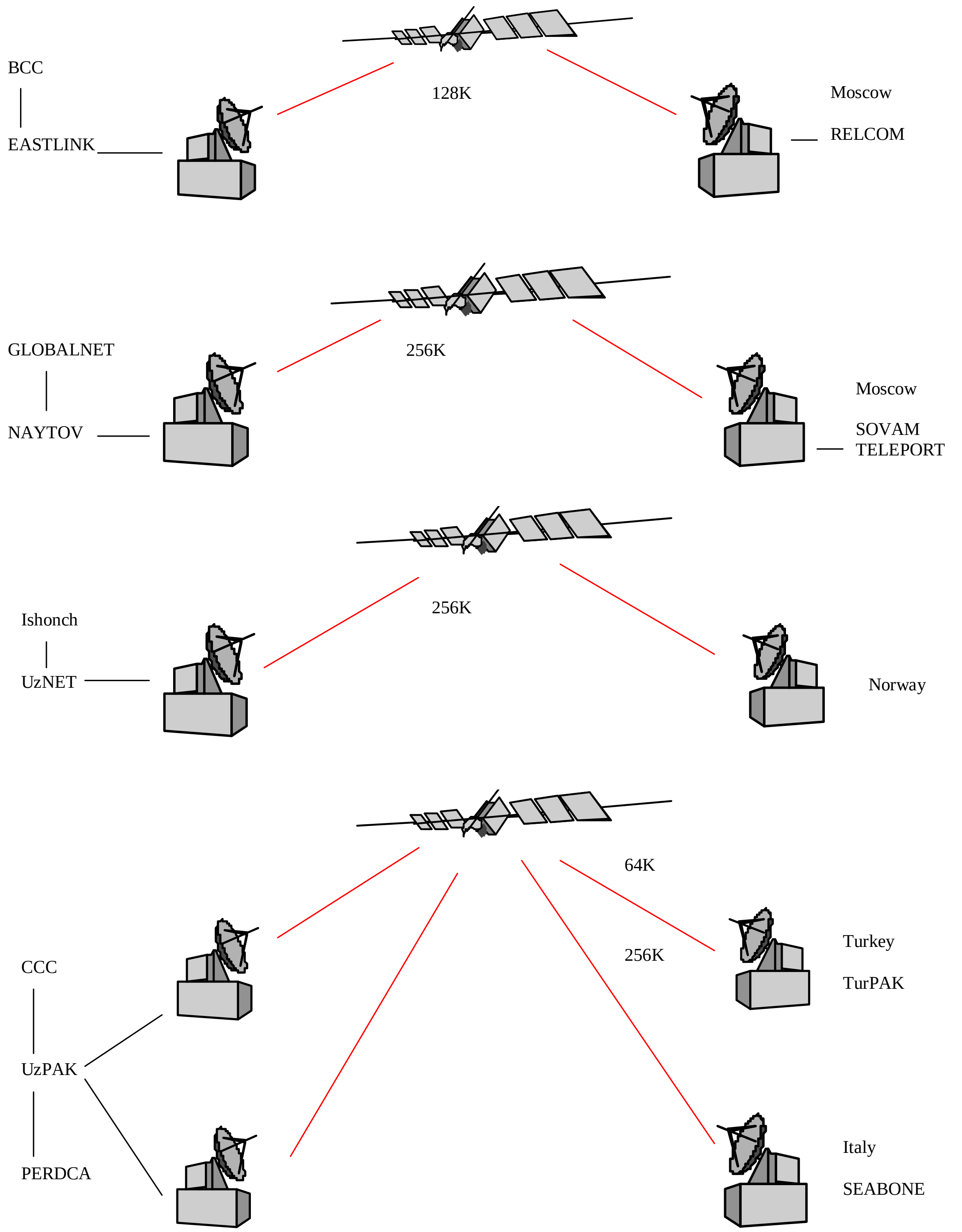
dev.eastlink.uz (194.220.214.2) Graph time = 10 Minutes

Data and Image generated by Ping Plotter (http://www.nessoft.com/pingplotter)

▪

Annex B : Satellite links to Tashkent

(Document : Léonid Miatejnikov)



Annex C : Mission to Tbilisi – Georgia

Tacis – Vadim Turdzeladze and Mamuka Chantladze

- there are about fifteen ISP in Tbilisi, all connected with the Internet by satellite
- Tacis uses a Globalnet's access, but very often all their lines are engaged. Sometimes, it takes half an hour to check mail.
- the rate is very low, the Web is almost unusable
- the TAE's Georgian segment is not finished because of funding
-

Infocom Ltd at the Ministry for Telecommunications

A private company, partner with the Ministry of Telecommunications, at the service of the organisations and the public :

- provides banks (X25 protocol), tax offices and customs
- has one centre in Tbilisi and about twenty in others regions, all connected by dedicated lines (64 to 128 Kbs, IP protocol)
- has two satellite links : via Moscow and Berlin
- assures that a local dial up access is available from all the main towns along the Traceca line in Georgia
- maintains that the line quality is his "own business" and that "it's possible to manage it"
- doesn't support GSM accesses

Sanet

The most important ISP in Tbilisi (1,500 consumers) :

- has two satellite links provided by Uunet : 1.5 Mbs via USA and 128 Kbs via London
- confirms the poor quality of the telephone lines, except of the new network built with digital switches

in most cases, the network is digital around Tbilisi

it's possible to buy a Tbilisi's telephone number and to use it from another region by the digital network

1. advantages : better network quality and local telephone call price in spite of a long distance
2. disadvantage : fixed-price (USD 3,000 for a year), in addition of local telephone call.

- I could verify, at a Sanet's customer home, while the traffic was quite heavy, that the available rate enables a reasonable use of the cleverly designed Web services, that is to say without too big page size.
-

International Telecommunication and Information Centre

- a private association with backing of Eurasia Foundation
- its main mission is to manage Internet training courses for representatives of NGO
- puts into effect Web services and data bases
- is familiar with the local access conditions :

- about a dozen of ISP in Tbilisi
- the first is Sanet : 1.5 Mbs via satellite and Uunet (MCI)

the second is ICN : Internet Caucasus Network

the third : Global One providing good GSM service

the telephone lines are very poor in Poti

GSM makes possible Internet accesses, from the whole country, for a single price rate : USD 6 per month and USD 0.5 per minute

some modems look like making a better hand with poor quality lines, for example, Xircom better than US Robotics

- would be able, if paid for, to manage training courses of people in charge of our data base up-dating
-

Irex –Tbilisi University

- opened in co-operation with the "United States Information Agency", sete up at the Tbilisi University, with backing of Soros Foundation
- provides :

a free training centre at the Parliament Library

Internet training courses

Web pages design training courses

"à la carte" training courses for journalists or business world

▪

Annex D : Mission to Baku - Azerbaijan

Telecommunications

- State monopoly : Aztelecom
- there is a private sector set up of a few companies. First of all, Catel (USA) providing fixed telephone connected via GSM. It has been impossible to get a meeting
- the TAE segment is not built because of the price to cross the Caspian sea
-

Internet service providers

- ISP need to obtain governmental licence
- the local market (4 or 5 ISP) is widely dominated by Intrans (Intra Network Systems) which seems very close to the government :
- satellite link via MCI (128 Kbs)
- sometimes, all the telephone lines are engaged ("about 10 minutes")
- recommends a 14.4 Kbs dedicated line (USD 400 per month) to avoid engaged PSTN lines. (We have not to adopt this proposition)
- I could visit 2 professional Intrans' consumers which seem satisfied et not suffering from engaged telephone lines. The tests I have done confirm good performances for satellite links.
-

Electricity

- State monopoly
- many breakdowns, mainly in the suburb
- breakdowns never last more than 1 or 2 hours at the Ministry of Transport
-

Annex E : Mission to Tashkent – Uzbekistan

Telephone

- PSTN
- the switch digitisation is in progress (about 50 %)
- old and poor quality lines staying
- the price of local telephone call is included in the monthly line rental
- ISDN : growth stopped because of lack of funding (private companies)
- GSM : Coscom, Uzmacom and Deawoo Unitel proclaim they provide all the country area, but this is not true.
-

Mains operators

- **GTS** = Municipal Telephone Station (governmental)
- privatisation study in progress
- monthly line rentals
- implement lines and telephone receivers
- implement and rental of dedicated lines

- **Uzpack** (governmental agency)
- has is own telephone network in all the regions of the country
- radial dedicated lines network from Tashkent : X25, frame relay, IP packets encapsulated in X25
- satellite links to the Internet : 256 Kbs via MCI and 256 Kbs via Italtel (BGP4 protocol)
- link to the Internet by Trans-Asia-Europe (TAE) fibre cable (we still haven't understood why the Director General, Alisher D. Khadjaev, prefers satellite connection)
- dial up connection available everywhere (except close to the Turkmenistan border where a long distance call would be necessary)
- switch slowing the transmission rate down to 28,8 Kbs
- chosen by the government to become the only link to the Internet in order to control it (sic)

- **Uznet** (governmental agency), provides satellite links to the Internet, but it seems difficult to get one

- **Naytov** (private Uzbek company), implements networks, link to the Internet via Moscow

Eastlink - ISP

- Private company set up 3 years ago by Lutko (investment company of United Arab Emirates) and Aviabrok (BDD company of Uzbekistan)
- has a licence of the Ministry
- has a satellite link to the Internet (128 Kbs via Moscow, VSAT protocol
- provides :

dedicated lines, radio links (40 km around Tashkent)

dial up IP connections

- already has dial up consumers from Nukus, Bukhara, Fergona
- there are problems with telephone lines close to Charzhou

Annex F : Carriage data base of CIS

Ministry of Transport – Telecommunication Department
URSS has brought a data centralising in Moscow information for carriage management over the whole railway network. It is still in use. Its aim is to make the carriages' use cost-effective. The set-up methods can be considered as a potential solution adjusted to the available human or technical resources.

In Tbilisi, the department has, at the Ministry of Transport's head office, premises well equipped, spacious and comfortable.

Telecommunications networks

- the network of the Ministry (10 Mbs)
- 12 links to the stations
- 8 links via dedicated lines 9 to 14,4 Kbs
- 2 links via PSTN on the railway network
- 2 links to borders (Armenia and Azerbaijan) via PSTN (1,2 Kbs). "A Hungarian putting in with a difficult and obsolete technology
- 1 link to Moscow via PSTN (28,8 Kbs – S1 protocol), connected from 5 PM to 11 PM. (2O Mo by day)
- 1 Internet access to daily exchange files with others CIS' country. The ISP is ICN : "conditions of use all right, but nothing special".
-

Equipment configuration

- several PC, Windows NT
- Visual Fox Pro data bases and applications

The application

- a carriages data base
- main fields :
  - N° of the carriage
  - type of the carriage
  - owner of the carriage
  - maximum permissible weight, live weight, unloaded weight
  - strength
  - number of bogies
  - alteration

each station has a data base concerning all the CIS' carriages. The consistency check between the carriage type and the goods description code is in progress in Moscow

- a movements data base

main fields :

- sequence number
- number of train's carriages
- N° of the carriage
- live weight, unloaded weight
- CIS' goods description code (The World Wide Railways Organisation edits another coding standard. The Department tries to use both together)
- rail sender
- consignee
- security category code
- sealed or not
- number of containers
- station of arrival
- customs clearance date (in and out)

During the keyboarding, the application executes 280 consistency checks, for example: goods description code and security category code or type of the carriage

A special agent, an inspector, notes the carriage N° at the train formation. He brings it back to the technical office of the station, checks on paper documents, then inserts data with automatic consistency checks

The application chains with invoice (2nd screen)