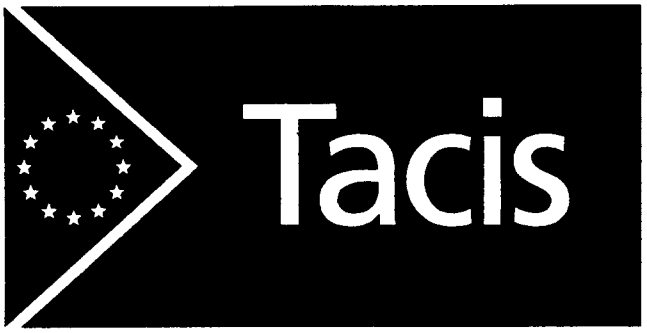


Traceca - Improvements of Road Transport Services in Central Asia

PROGRESS REPORT

18 July 1996

Project Title	:	Improvement of Road Transport Services	
Project Number	:	TNREG 9402	
Country	:	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan	
		Local operator	EC Consultant
Name	:	_____	Sir Alexander Gibb & Partners
Address	:	_____	Earley House, London Road Reading, Berks. RG6 1BL
Tel. number	:	_____	(0044) 1734 635000
Fax number	:	_____	(0044) 1734 491054
Telex number	:	_____	_____
Contact person	:	_____	Daniel Giblin
Signatures	:	_____	

Date of report : 18 July 1996

Reporting period : Progress Report

Author of report : Mick Jackson - Project Manager

EC M & E team	_____ [name]	_____ [signature]	_____ [date]
EC Delegation	_____ [name]	_____ [signature]	_____ [date]
TACIS Bureau [task manager]	_____ [name]	_____ [signature]	_____ [date]

TABLE OF CONTENTS

1. PROJECT SYNOPSIS

Project Title	:	Traceca - Improvement of Road Transport Services, Central Asia
Project Number	:	TNREG9402
Country	:	Kazakhstan, Kyrgysztan, Tajikistan, Turkmenistan, Uzbekistan

Project Objective : To facilitate development of the domestic and international road traansport industries within the Partner States.

Planned outputs :
- Transport Regulation Manual
- Compliance Schedule
- Business Manuals
- Almaty Semiinar on regulatory issues
- UK Study Tour
- State Seminars

Project Activities :
- Preliminary Appraisal Mission
- Studies
- Business Plans and Technical Assistance
- Licensing and Technical Standards
- Seminars

Project Start Date : 19 February 1996

Project Duration : 12 months

2. PROJECT PROGRESS FROM THE START

This summary shows the development of the project over the first five months of operation.

2.1 Project Inception Stage

Project established.

Office established within NIIAT in Almaty.

Relations established in each Republic with :

- *Transport Ministry*
- *JS Transport Enterprise and private operators*
- *Transport Association (except Tajikistan and Kyrghstan)*
- *Research Institute (except Tajikistan and Turkmenistan)*

2.2 Studies

- *Background data collections initiated in all Republics.*
- *Clearance to receive data only obtained in Kazakhstan (see below).*
- *Operator surveys underway in all Republics.*
- *Background analysis completed as model on Kazakhstan.*

2.3 Business Plans and Direct Technical Assistance

- ***Support Services Pilot** underway with blueprint being established in Kyrghstan and Kazakhstan.*
- ***Transport Associations Pilot** refocused as a result of feedback at seminars on to the development of blueprint for CPC provision in Uzbekistan.*
- ***Operators Quality Pilot** underway with Sealand and Gaz Trucks developing blueprint in Kazakhstan.*

2.4 Licensing & Technical Standards

- *Definitive listing of European Regulations produced.*
- *Draft Regulations Manual produced but not issued.*
- *Current regulatory situation identified and debated for each Republic.*

2.5 Seminar Programme

- *Regional Seminar successfully held in Almaty June 1996.*
- *Business Operations Manual issued to delegates.*
- *Delegate list agreed for UK Study tour*
- *Programme finalised for UK Study tour.*

3. SUMMARY OF PROJECT PLANNING

3.1 Introduction

The next Phase of the project will be progressed on the following fronts

- *Studies*
- *Business Pilots*
- *Transport Regulations*
- *Seminar Programme*

3.2 Studies

- *Vehicle supply data collection to be completed*
- *Micro-demand data to be collected (ongoing)*
- *Support service data to be completed*
- *Macro-demand data to be supplied by W.S. Atkins*

3.3 Business Plans and Direct Technical Assistance

3.3.1 Support Services Pilot

- *Development of relationship between Iveco and potential dealers in Kazakhstan and Kyrghstan.*
- *Business Plan for support network*
- *Specify infrastructure requirements for support services network*
- *Investigate funding for infrastructure*
- *Develop relationships with other suppliers (FSU)*

3.3.2 Transport Associations Pilot

- *Specify roles for Ministry, Research Institute, Trade Association and Operators*
- *Train 20 people to International CPC and award certificates*
- *Create examination regime*
- *Create business plan for alternative training provision*

3.3.3 Operator Quality Pilot

- *Develop relationships between Kazakh operator, Sealand and other Western European companies*
- *Through the Ministry ensure open access to Almaty Rail Station*
- *Develop Business Plan with Kazakh operator*
- *Identify Key Service Level Indicators and measure performance*

3.4 Licensing and Technical Standards

- *Produce draft Transport regulations Manual*
- *Produce draft Compliance Schedule*
- *Discuss Manual and Schedule with delegates and Scott Wilson Kirpatrick*
- *Publish Final Manual and Compliance Schedule*

3.5 Seminar Programme

- *Hold Uk Study Tour 4-18 September 1996*
- *Hold State Seminars - Ashgabad, Tashkent, Almaty - October 1996*

4. PROJECT PROGRESS FOR PERIOD APRIL - JULY 1996

4.1 Achievements

The comparison of achievements with planned results is shown below. The numbers in parentheses correspond to those in the TOR.

4.1.1 Studies (3.2)

Vehicle Supply and demand (3.2.1)

This data has been particularly difficult to collect for the reasons outlined in the Inception Report.

Current fleet distributions are pivotal to this section and these are considered state secrets in every Republic. We have finally gained clearance to receive the data in Kazakhstan in June 1996, three months after our formal request. Relevant correspondence is contained in **Annex A.**

Having obtained the data for Kazakhstan and thereby seeing what is available, we have been able to request specific information from the other Republics. A list of the data headings obtained for Kazakhstan is contained in **Annex B** to this report. This list has now been handed to Ministry representatives from each of the other four Republics at the Almaty seminars and collection is underway. In parallel, formal letters requesting release of the information have been sent and these are contained in **Annex C** of this report.

Annex D contains an analysis of the Kazakhstan data to demonstrate what will be done providing full data is made available from the other Republics. At the time of writing, data has just been released from Kyrghstan and Uzbekistan but that data has not yet been verified or analysed.

Demand forecasts are being compiled at the micro-scale using an ongoing survey of operators in each Republic. Information has currently been collected on more than 100 vehicle movement patterns. Regarding macro-demand forecasts we are currently in discussion with WS Atkins about access to their data on trade flows within and between the Republics.

Automotive Parts and Services (3.2.2)

Data has been collected and analysed on all aspects of support services including vehicle dealerships and spare parts provision in Kazakhstan and Uzbekistan. Surveys are also underway in the other Republics. Preliminary analysis of the services is contained in **Annex E**.

Commercial Services (3.2.3)

This section includes examinations into Freight Brokering, Commercial Transport Centres and Vehicle Off Road. The services were, in the main concentrated in Kazakhstan and we have examined their current status. **Annex F** contains a brief report on this.

4.1.2 Business Plans and Technical Assistance (3.3)

The bulk of the project resource during the period has been concentrated on the establishment of the pilots and the provision of technical assistance.

Support Services Project (3.3.1)

We have received an enthusiastic response from Iveco Trucks, our European partner in this pilot. Historically Iveco, like other European truck manufacturers such as Renault, Volvo and Mercedes, have had a number of problems in establishing an effective network in Central Asia and were seriously considering pulling out from the region.

Their efforts previously have concentrated on large, Ministry - connected Joint-Stock Enterprises which have proved to be ineffective and inflexible due partly to a lack of Western management techniques. They have a desire to co-operate with small, truly independent transport operators, a model which is used with some success in other areas of the FSU.

As a result of our seminars and related activities, Iveco have made contact with:

- *An independent Kazakh operator based in Almaty who is a partner for the Operator Quality Pilot (see below). This company will also be linked with Iveco in a later phase of the project.*
- *An independent Tajik operator who is keen to become an Iveco dealer although some reform is necessary in that Republic prior to that happening. This too is planned for a later phase of the project.*
- *In the absence of any independent operators from Uzbekistan and Turkmenistan pending privatisation, we were unable to effect introductions to small operators. However, a large operator from Turkmenistan is now in discussion with Iveco concerning supply of used trucks as a result of the Almaty seminar.*

Discussions are underway between Iveco and a Kyrgese/Indian Joint Venture freight forwarding company who is set to become an Iveco dealer. The experiences of establishing this dealership will be monitored and used as a blueprint for the other Republics. A brief description of this company, Kyrgese Indian Transport Company (KIT Co.) is contained in **Annex G**

Transport Associations Project (3.3.2)

Following detailed discussions with interested parties in each Republic and other Traceca Contractors and taking account of universal feedback from the Almaty Seminar we have refocused this pilot and this is discussed in detail in **Section 4.2** below.

Operator Quality Project (3.3.3)

This project has enjoyed a much clearer focus during the reporting period. In discussion with current and potential European shippers it has become clear that there is a major barrier to the development of an open market for transport in Central Asia. This is due to the uncertain treatment of inbound shipments by local operators. Concerns include, safety, reliability, procedures and bureaucracy and hence cost.

One of the main themes of the Almaty Seminar which is reinforced in the operator's Business Manual is the need to achieve consistently reliable, high quality local distribution. This theme was totally reinforced by the partner organisation Sealand who are desperate to find reliable local counterparts in each Republic and who, like Iveco have considered withdrawing from Kazakhstan in particular because of past problems.

An operator has been identified in Kazakhstan to take part with Sealand in the pilot to establish a working blueprint for Central Asia. This company, Bayan Aul, is based in Almaty, has a good track record and displays the flexibility and entrepreneurial approach necessary to establish the blueprint. Details of the company are contained in **Annex H.**

A number of Western companies are showing an interest in the pilot. One of these is Whestship a Belgian shipping and forwarding company with three years experience in Central Asia. The pilot will lead to the presence of a company which complies with international CPC requirements and is also able to offer a consistently reliable local distribution service in Kazakhstan. Initial Business Plans are being prepared with the company, along with the identification of Key Performance Indicators that will be deemed necessary to monitor service level by potential European Shippers. More detail is given on this in **Section 5** below.

In completing the pilot thus far, it has become clear that there is a major problem concerning the collection of containers from the state owned Almaty railhead. This is something that has to be resolved for the pilot to be able to continue and a joint initiative is underway with the Kazakh Ministry of Transport to resolve this. This is discussed further in **Section 4.3** below.

4.1.3 Licensing and Technical Standards (3.4)

A definitive list, running to many volumes, has been produced of current regulations in force in the EC. This was contained in the Inception Report (Annex F of that report) and has been offered to Scott Wilson Kirkpatrick as an example of what will be required in the form of legal backing.

A draft Regulation Manual has been prepared but not yet issued. The Almaty Seminar was used to discuss the current situation in both Europe and each Republic. A brief summary of those discussions is contained in **Annex I** of this report.

Each section of the draft Regulation Manual will be considered in turn and a Compliance Schedule produced which will determine the pace at which the Central Asian regulations will be able to meet European Standards. This will then be discussed on the UK study tour, finalised and issued in October 1996.

4.1.4 Seminars (3.5)

Almaty Seminar

The regional seminar was held successfully in Almaty 10-14 June 1996.

The seminar was divided into two main sections:

Transport Regulations

This was attended by representatives from the Ministry of Transport from each Republic and the representatives from Joint Stock Transport Enterprises. This ensured that current and targeted regulations were discussed both by the people responsible for policy/enforcement and the people who would need to comply.

This group received copies of presentation material relating to the current European regulatory regime.

Transport Business Management

This was attended by representatives from the transport associations in each Republic and by independent Transport Operators. Where no independent transport operators were represented, Ministry representatives responsible for privatisation were present.

This group concentrated on practical aspects of running a transport business and were provided with extensive working business manuals.

Representatives from the Research Institutes were evenly spread between the two groups. Each day, time was devoted to a plenary session where the regulatory issues were introduced and external presentations from Iveco and Sealand were made to the whole group with a business focus.

A full set of seminar material including programme and delegate list is contained in **Annex J**.

The seminar was well received with all delegates rating the core of the seminar good or excellent. A full breakdown of the delegate feedback for each part of the seminar is contained in **Annex K**.

4.2 Deviations from plan

In general, the original plan and timings are being adhered to. Certainly, there is no change to the overall project objectives or completion schedule

4.2.1 Implementing Business Pilots

Following guidance from the Traceca Task Management we have expedited development of the business pilots in order to accelerate the introduction of commercial benefits. This has served to utilise the time that was originally allocated to the analysis of the data which is not yet available.

4.2.2 Transport Association Business Pilot

There has been a re-focusing of one of the Business Pilots - that relating to the Transport Associations. In the inception report this was planned to be the establishment of a blueprint for a Transport Association and the creation of a forum for such Associations to discuss Central Asian issues of common interest.

After extensive discussions with a number of interested parties within the Area during the reporting period, there has been a change of emphasis on this pilot. The pilot is now to create a blueprint for the provision of training necessary to enable the award of a Certificate of Professional Competence (CPC) which is an essential precursor to any regulatory system.

The pilot will now focus on to the creation of a blueprint for the provision of a CPC and will be carried out in Uzbekistan, involving the Uzbek Transport Association, Ministry of Transport and TADI, the Transport Research Institute of Uzbekistan.

The reasons for refocussing this pilot are :

- *Consultation with Scott Wilson Kirkpatrick (SWK) has revealed that one of their key objectives is the formation of a Transport Association in each Republic along with Customs Agents Associations and Freight Forwarders Associations.*
- *All European countries require a CPC or equivalent as proof of worthiness to be transport operator prior to the issue of an operators licence.*
- *There is a universal requirement for such a course to be provided in Central Asia by government, operators and potential European customers.*
- *There are a number of options for the provision of such courses, ranging from in-house provision by Transport Associations, through sub-contracting by the Research Institutes and Universities to the emergence of independent training providers to provide training direct to operators.*

- *With the situation of Transport Associations in flux pending the SWK projects, it is important to establish a commercial blueprint for the provision of these services. That blueprint can then be applied in each Republic according to the eventual form of its Transport Association.*
- *The British Freight Transport Association has had previous experience, successfully implementing CPC courses in the FSU.*

4.3 Action required from local authorities

Assistance from the authorities will be necessary in two areas:

- *Data availability*
- *Changes in commercial environment*

4.3.1 Data availability

The most serious delay to the project to date has been as a result of the classification of essential data as 'State Secrets'.

The assistance of Tacis or, if necessary the EC direct is requested to expedite the prompt release of the data contained in **Annex B**. The letters contained in **Annex A** refer.

4.3.2 Changes in commercial environment

As a precursor to the Operator Quality Pilot in Kazakhstan (3.3), there is a need to remove restrictive practices which gives one organisation unfair advantage at the Almaty railheads.

The pilot includes a survey by the Kazakh Ministry of Transport into those practices by tracking some containers through the station. The conclusion of the surveys will be a requirement to cease the monopolistic practices and give access to any company to collect their container. Should this prove politically sensitive within Kazakhstan, we may require assistance from Tacis.

5. PROJECT PLANNING FOR THE NEXT PHASE

5.1 Introduction

The remainder of the project will be progressed on a number of fronts ;

- *Data collection and analysis*
- *Business Plans and Technical Assistance*
- *Licensing and Technical Standards*
- *Seminar Programme*

The following section covers each of these points with section 5.3 containing observations for the project success and 5.4 containing adjustments to the overall plan.

5.2 Project Planning

This section takes each stage of the project and summarises the action which is planned for each. For clarity, the stages are numbered using the same approach as the inception report.

5.2.1 Studies (3.2)

The collection and analysis of data is necessarily an ongoing process within the project. Delays caused by obtaining clearance for data release has slowed this process for some Republics.

At the time of writing, outstanding data has been received from Kyrghstan and Uzbekistan but not yet verified or analysed.

During the next period, we will endeavour to collect the outstanding vehicle/support service supply data on the set questionnaire format. The situation will be given a final review on the study tour in September and any deficiencies will be reported to Tacis with a request for formal assistance.

Concerning collection and analysis of demand data, there is a clear overlap here with the W S Atkins project. Discussions with Atkins have suggested that they will have some macro-demand data available from mid-September and that this will be shared with us.

In turn, we are in the process of collecting micro data via our ongoing operators survey and will make the results of that available to WS Atkins. This will allow, where possible, corroboration of results between the two surveys.

5.2.2 Business Plans and Technical Assistance (3.3)

Each of the three Pilots concentrates on the development and testing of a specific Business blueprint. In each case, the blueprint is to be developed in a single Republic but that business is required in each of the Republics **at some time.**

This leads us to propose a 3-phase approach thus

Phase 1 — The three pilots described below - timed to be completed within this overall project.

Phase 2 — The rolling-out of the successful Blueprint for each pilot to those Republics that have a commercial and institutional infrastructure capable of allowing the business to prosper. This will be the subject of a project extension and will need to be implemented from October 1996 to April 1997.

Phase 3 — The rolling-out of the remaining blueprints to those Republics that do not yet have the requisite commercial/institutional infrastructure in place. Depending on the pace of infrastructure development in those Republics, this project extension could occur between April and October 1997.

The pilot phases by Republic are listed below.

Republic	Pilot 3.1 Support Services	3.2 CPC Support	3.3 Operator Quality
Kazakhstan	Phase 2	Phase 2	**Phase 1**
Kyrghstan	**Phase 1**	Phase 3	Phase 2
Tajikistan	Phase 3	Phase 3	Phase 2
Turkmenistan	Phase 3	Phase 3	Phase 2
Uzbekistan	Phase 2	**Phase 1**	Phase 2

The planned action for Phase 1 of each pilot is shown below.

5.2.3 Support Services Pilot (3.1)

The overall objective of this pilot is to establish and prove a blueprint for the operation of a support services organisation built around a European truck dealership, transport operation and a spare parts distributor. Subsidiary aims of the pilot are :

- *To monitor the introduction of the Iveco dealership in Kyrghstan and develop this as the blueprint for dealerships in the other Central Asian Republics.*
- *To investigate options for potential customers of the dealership to raise finance (including leasing) in Kyrghstan.*
- *To investigate options for the provision of insurance for customers of the dealership.*
- *To establish, with Iveco, Key Performance Indicators by which the dealership will be judged.*
- *To specify, with Iveco, the physical infrastructure necessary to establish a dealership including showrooms, spares supply and vehicle servicing.*
- *To investigate the supply chain for vehicles and parts. This will be done initially in Almaty as the inbound shipments of GAZ parts is investigated and lessons learnt will be applied to Kyrghstan*
- *To investigate the establishment of cooperations with other vehicle suppliers (especially those from FSU). These will range from the provision of servicing on an ad-hoc basis through to complete infrastructure sharing.*
- *To produce the blueprint for the support service which will include:*
  - *a business plan format*
  - *a marketing plan and pack*
  - *a finance package for dealership customers*
  - *an insurance package*
  - *a list of Key Performance Indicators and a system to monitor them*
  - *physical requirements of the dealership.*

The pilot which has already commenced will run through until November 1996. The interim blueprint will be discussed on the study tour and will be presented at the State Seminars in October.

5.2.4 Transport Association Pilot (3.2)

The main objective of this pilot is to produce a blueprint for a CPC regime, formulated in Uzbekistan but which can then be used to allow each of the five Central Asian republics to establish such a regime when their infrastructure allows.

Subsidiary aims of the pilot are:

- *To produce a business plan for the venture which will examine*
  - *potential customers for a CPC*
  - *the structure of the market*
  - *recommendations for exploiting the market*
  - *alternative means of supplying the CPC training*
  - *a budget for first year operation*
  - *a three year development plan*
- *To produce a set of CPC tuition notes comprising:*
  - *full notes for teaching an international CPC*
  - *partial notes for teaching a national CPC identifying:*
    - *issues of general commercial interest*
    - *issues which require specific local legislation prior to their introduction*
    - *examples of paperwork encountered in international transportation*
  - *a student guide to the CPC procedure and expectations*
- *To execute pilot CPC course to be held in Tashkent during August 1996 with tuition given to representatives of:*
  - *the TADI Institute as trainers*
  - *the Ministry of Transport*
  - *the Uzbek Transport Association*
  - *Uzbek transport operations*
- *To provide a clear identification of the roles to be played by each of the above plus universities and private training providers.*
- *To establish a blueprint for an examination and administration regime for CPCs. This will include:*
  - *identification of roles and responsibilities*
  - *establishment of an examining committee*
  - *provision of a full set of examination preparation notes*
  - *provision of a set of rules of examination including invigilation and security procedures*
- *To provide a number of options for course delivery including home study elements.*
- *To establishment both a mock and final examination for delegates on the pilot course.*

- *To assist in the review of the examination papers and the award of certificates to successful graduates of the pilot course with the British FTA and the Uzbek Ministry of Transport as the temporary awarding body.*

This business pilot will have the following stages:

1. The pilot CPC course will take place during August 1996 and will be reviewed by the whole delegate group for the main project during the UK study tour in September. During the study tour, consideration will be given for the potential CPC regime in each republic.

2. The business plans will then be reviewed and finalised for the Uzbek venture.

3. The CPC regime will then be outlined for each republic during the state seminars in October and progress reviewed on the Uzbek pilot.

4. The CPC regime will be extended into the other republics. These will be subject of project extensions as their institutional infrastructure develops.

Operator Quality Pilot (3.3)

The overall objective of this pilot is to create and prove a blueprint for the establishment of an enterprise which is able to deliver reliable high quality local (Central Asian) distribution of European goods.

With the pilot located in Kazakhstan, its subsidiary aims are:

- *To establish a sound working relationship between Bayan Aul and our Western associate companies.*
- *To identify key areas of concern for shippers to Kazakhstan and where possible address those issues within the pilot. We have commissioned a study by the Ministry of Transport into the passage of containers through the Almaty railheads and the restrictive practices that are prevalent there.*
- *To establish with Bayan Aul, a business plan for the pilot. Particular emphasis will be placed upon the creation of a marketing and financial action plan, including the establishment of case studies and a presentation which will be given to prospective customers to demonstrate capabilities.*
- *To identify the costs involved in provision of local distribution and to establish a pricing strategy.*
- *To establish a budget for the pilot and implement a management accounts system to track the operation.*
- *To establish a number of Key Performance Indicators that are of particular relevance to the provision of a consistently high quality service and to track performance of the company according to those measures.*
- *To identify the 'quality premium' and include that in the pricing strategy.*

- *To prepare a high quality audio-visual presentation outlining the company's enhanced capabilities and present that to potential British shippers at the UK study tour in September.*

The blueprint and results will be presented to phase 2 partners at the State Seminars in October.

5.2.5 Licensing and Technical Standards (3.4)

The overall objective for this part of the project is to produce a Transport Regulations Manual which will be issued to delegates at the State Seminars in October.

Subsidiary aims within this are :

- *To produce a manual showing the current European standards for each individual regulation. This has been achieved.*
- *To produce a Compliance Schedule showing the current Central Asian standards for each regulation and a timetable over which Central Asian and European standards will converge.*
- *To agree this Compliance Schedule with Scott Wilson Kirkpatrick in terms of the implementation programme for the legal framework. Meetings are organised in August to achieve this.*
- *To discuss the Compliance Schedule with delegates at the study tour in September.*
- *To issue the Transport Manual, including the Compliance Schedule at the State Seminars in October.*

5.2.6 Seminar Programmes (3.5)

Following the successful Almaty Regional Seminar in June, the remaining two seminars of the programme are:

- *The UK Study Tour*
- *The State Seminars*

The UK Study Tour (5.2)

The overall objective of the UK study tour is to continue the twin themes of the Almaty Seminar (Transport Regulations and Transport Business Management) and to expose the delegates to practical aspects of both on the ground in Europe.

The study tour will be 4-18 September and will be held at the British Freight Transport Association's Residential Management Training college in Wadhurst, East Sussex.

A draft copy of the programme for the tour is contained in **Annex L**.

State Seminars (5.3)

A series of State Seminars will be held during October 1996 in Tashkent, Ashgabad and Almaty.

The content of the seminars is yet to be finalised but will include :

- *An outline of the proposed regulatory regime for each Republic.*
- *An outline of the options for a CPC scheme for each Republic.*
- *An outline of the results of the Support Services pilot and the implications for each Republic.*
- *An outline of the results of the Operator Quality pilot and the implications for each Republic.*

Delegates for each 2-day seminar will include third party and own account operators from each Republic.

5.3 Adjustments to the overall plan

Detailed adjustments to date have been discussed in section 4.2.

The concentration in the previous period on the Business Pilots and the delay in receiving data from some Republics means that the full analysis outlined in the Studies TOR will be carried out at a later stage.

Project title: Traceca - Improvement of Road Transport Services Central Asia	Project Number: TNREG9402	Country: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan & Uzbekistan	Page:
Planning Period: 19 Feburary - 18 July 1996	Prepared on: 18 July 1996	EC Consultant: Sir Alexander Gibb & Partners Ltd.	
Project Objectives: To facilitate the development of the domestic and international road transport industries within the Partner States.			

No	ACTIVITIES IMPLEMENTED	TIME FRAME 1996 (Weeks)							INPUTS							
									PERSONNEL EC CONSULTANT		COUNTERPART		EQUIPMENT AND MATERIAL		OTHER	
		FEB	MARCH	APRIL	MAY	JUN	JULY	AUG	Planned	Utilised	Planned	Utilised	Planned	Utilised	Planned	Utilised
1	**Preliminary Appraisal Mission**		xxx						8.8	8.8	4.4	4.4	1 Photocopies		16 UK Filights	12 UK Flights
2	**Studies**												Office Equipment		21 CA Flights	10 CA Flights
2.2	Vehicle Supply/Demand			xxxx	xxxx	xxxx	xxxx		4.4	2.2	19.8	9.5	4 PC's		8 car trips	12 car trips
2.3	Automotive Support Services			xxxx	xxxx	xxxx	xxxx		4.4	1.1	9.9	6.6	4 Software			
2.4	Commercial Services			xxxx	xxxx	xxxx	xxxx		2.2	1.1	8.8	2.2	2 Back-up			
3	**Business Planning**												2 Internet			
3.1	Support Services				xx	xxxx	xxx		7	7	17.6	12	2 Printers			
3.2	Transport Association				xx	xxxx	xx		6.2	7	4.4	6	1 Fax			
3.3	Operators Quality				xx	xx	xx		8.8	8.8	13.2	10	1 Scanner			
4	**Licensing & Technical Standards**		xx	xxxx	xx	xxxx	xxxx		8.8	8.8	4.4		2 Modems			
5	**Seminars**												1 Phone			
5.1	Almaty Seminar	x	xxx	xxx	xxxx	xx			6.6	7	8.8	8.8	1 Overhead			
5.2	Uk Study Tour					xx	xx		0.44	1.1	0	2.2	3 Flipchart			
													Stationery			
													Slide Projector			
							TOTAL		57.64	52.9	91.3	61.7	0	0	0	0

Resource Utilisation Report

Project Title: Traceca - Improvement of Road Transport Services Central Asia	Project Number: TNREG9402	Country: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan & Uzbekistan	Page:
Planning Period: 19 February - 18 July 1996	Prepared on: 18 July 1996	EC Consultant: Sir Alexander Gibb & Partners Ltd.	
Project Objectives: To facilitate the development of the domestic and international road transport industries within the Partner States.			

RESOURCES/INPUTS	TOTAL PLANNED	PERIOD PLANNED	PERIOD REALISED	TOTAL REALISED	AVAILABLE FOR REMAINDER
PERSONNEL					
Project Director	1.6	0.9	1.1	1.1	0.5
Project Manager	3.6	1.95	1.95	1.95	1.65
Transport Economist	4.1	2.95	2.95	2.95	1.15
Project Control Manager	0.9	0.6	0.6	0.6	0.3
Project Financial Advisor	0.6	0.23	0.43	0.43	0.17
Management Accounts Specialist	0.82	0.36	0.36	0.36	0.46
Road Operations Specialist	4.1	3.36	2.36	2.36	1.74
Road Freight Specialist	2.73	2.3	1.82	1.82	0.91
Translator (London)	1.14	0.45	0.45	0.45	0.69
Total - EC Experts	19.59	13.1	12.02	12.02	7.57
Local Experts	25	20.9	14.02	14.02	10.98
EQUIPMENT AND MATERIAL					
Photocopiers	1	1	1	1	0
Office Equipment	6	6	6	6	0
Personal Computers	4	4	4	4	0
Software	6	4	4	4	2
Back-up	1	2	2	2	-1
Internet connections	2	1	1	1	1
Printers	2	2	2	2	0
Fax machines	1	1	1	1	0
Scanners	1	1	1	1	0
Modems	2	1	1	1	1
Telephones	1	1	1	1	0
Overhead Projector	2	2	2	2	0
Flipcharts	3	3	3	3	0
Stationery	1	0.5	0.5	0.5	0.5
Slide Projector	1	1	1	1	0
OTHER INPUTS					
Flights	55	37	22	22	33
Car Trips	10	8	12	12	-2

Form 2.4

Output Performance Report

Project titl Traceca - Improvement of Road Transport	Project Number: TNREG9402	Country: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan & Uzbekistan	
Planning Period: 19 Feburary - 18 July 1996	Prepared on: 18 July 1996	EC Consul Sir Alexander Gibb & Partners Ltd.	
Project Objectives: To facilitate the development of the domestic and international road transport industries within the Partner States.			
Output results	Deviation from original plan + of -	Reason for Deviation	Comments
1 PRELIMINARY APPRAISAL MISSION			
2 STUDIES			
2.1 Vehicle supply & demand	Kazakh analysis only	Delays in release of data	See section 4.1
2.2 Automotive support services	Kazakh and Uzbek analysis only	Methods piloted	See section 4.1
2.3 Commercial services	Kazakh only	Services only present in Kazakhstan	See Annex F
3 BUSINESS PLANS & TECHNICAL ASSISTANCE			
3.1 Support services pilot	Operator selected - pilot specified		See section 5.2
3.2 Transport Association pilot	CPC pilot specified		See section 5.2
3.3 Operator quality pilot	Operator selected - Business manual issued		See Annex J
4 LICENSING & TECHNICAL STANDARDS			
Draft regulations manual	Produced not yet issued	Draft to be discussed with compliance schedule	
Compliance schedule	Scheduled production 31 August	Allowing discussions with SWK	
Final regulations manual	Scheduled production 27 September 1996		
5 SEMINARS			
5.1 Almaty Seminar	Seminars delivered		See Annex J
5.2 UK Study Tour	Programme set		See Annex L

Project titl Traceca - Improvement of Road Transport Services Central Asia								Project Number: TNREG9402		Country:		Page:
Planning Period: 19 Feburary - 18 July 1996								Prepared on: 18 July 1996		EC Consultant:		
Project Objectives: To facilitate the development of the domestic and international road transport industries within the Partner States.												
No	ACTIVITIES IMPLEMENTED	TIME FRAME 1996								INPUTS		
		Weeks							PERSONNEL EC CONSULTANT	COUNTERPART	EQUIPMENT AND MATERIAL	OTHER
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	Planned	Planned	Planned	Planned
1	**Preliminary Appraisal Mission**								0			
2	**Studies**											
2.2	Vehicle Supply/Demand	xx	xxxx	xx	xxxx	xxxx	xxxx	xxxx	4.1	10.3		
2.3	Automotive Support Services	xx	xxxx	xx	xxxx	xxxx	xxxx	xxxx	2.1	5.3		
2.4	Commercial Services								0.1	1		
3	**Business Planning**											
3.1	Support Services	xx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	8	9.5	2 software	33 flights
3.2	Transport Association	xx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	7	8	1 internet	10 car trips
3.3	Operators Quality	xx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	8	4	1 modem	
4	**Licensing & Technical Standards**								1	2	Stationery	
5	**Seminars**											
5.1	UK Study Tour		x	xx					1	2.2		
5.2	State Seminars			x	xxx				2	6		
							TOTAL		33.3	48.3	0	0

List of Annexes

Annex	Topic
A	Correspondence relating to the release of data in Kazakhstan
B	Data headings requested from each Republic
C	Correspondence requesting release of data
D	Analysis of Kazakhstan data
E	Preliminary analysis of support service data
F	Report on the current position of commercial services in Kazakhstan
G	A profile of the Kyrgyse-Indian Transport Company
H	A profile of the Bayan-Aul company in Kazakhstan
I	A summary of the Transport Regulation section of the Almaty Seminar
J	A full set of Material for the Almaty Seminar
K	Delegate feedback for the Almaty Seminar
L	A draft copy of the UK Study Tour Programme

ANNEX A

CORRESPONDENCE RELATING TO THE RELEASE OF DATA IN KAZAKHSTAN

Ministry of Economy of Republic Kazakhstan

08 05 96

Government of
Republic Kazakhstan

Ministry of Economy and Mintranscom (Committee of Ministry of Transport) have considered the letter submitted by Mr. Alex Boulting on difficulties that occur during data collection process about freight transport that is necessary for implementing "Improvement of Road Services in Central Asia" Project and have decided the following

Considering that this project is developing within Tacis programme, that is technical assistance to CIS countries run by EC and aimed at development of international road transportation so important for Kazakhstan, we find it possible for Goskomstat and Ministry of Interior Affairs to release all necessary data for this project in accordance with legally stipulated procedure.

First Deputy of Minister J Ertlesova

Regarding the letter of Ministry of Economy dd 08.05.96, No 01-3/3047-18

Deputy of Prime Minister of Republic Kazakhstan

1 To agree with the decision of Ministry of Economy
2 Goskomstat - Mr. Goryachkovsky V.I. and Ministry of Interior Affairs - Mr Suleymenov K.S. to execute
3 Ministry of Economy to advise Mr. Boulting to address to Goskomstat and Ministry of Interior Affairs for obtaining these data.

V Sobolev

15 05 96
No 22-36/5074

62-17-45
Абдреев Батырбек

КАЗАКСТАН РЕСПУБЛИКАСЫ
ПРЕМЬЕР-МИНИСТРІНІҢ ОРЫНБАСАРЫ

ЗАМЕСТИТЕЛЬ ПРЕМЬЕР-МИНИСТРА
РЕСПУБЛИКИ КАЗАХСТАН

1. Согласиться с предложением Минэкономики.
2. Госкомстат
Горячковскому В.И.
МВД
Сулейменову К.Ж.
Для исполнения.
3. Минэкономики
Ботлесовой З.Д.
Известите г-на Боултинга о необходимости обращения в Госкомстат и МВД республики.

В.Соболев

15 мая 1996г.

№ 22-36/3074

К письму Минэкономики от 08.05.96г.
№ 01-3/3047-13

18

ҚАЗАҚСТАН
РЕСПУБЛИКАСЫНЫҢ
ЭКОНОМИКА МИНИСТРЛІГІ

Телетайп 287. 480091. Алматы қаласы,
Желтоқсан көшесі, 115. Кеңсе тел. 63-85-89.

МИНИСТЕРСТВО
ЭКОНОМИКИ
РЕСПУБЛИКИ КАЗАХСТА

Телетайп 287. 480091. г. Алматы,
ул. Желтоксан. 115. тел. 63-85-89.

8.05.96г № 01-3/3047-18

На № 22-36/5074 от 25.04.1996г.

Правительство
Республики Казахстан

Минэкономики рассмотрело совместно с Минтранскомом письмо г-на Алекса Воултинга о затруднениях в сборе информации по грузовому автотранспорту для реализации проекта "Улучшение автодорожного обслуживания в Центральной Азии" и сообщает.

Учитывая, что данный проект осуществляется в рамках Программы "Технической помощи республикам СНГ" (TACIS), проводимой Европейским сообществом, и направлен на развитие международных автомобильных перевозок, имеющих актуальное значение для Казахстана, считаем возможным разрешить Госкомстату и МВД республики предоставить необходимые материалы в установленном порядке.

Первый заместитель Министра Ж. Ертлесова

004781

ANNEX B

DATA HEADINGS REQUESTED FROM THE REPUBLICS

DATA HEADINGS REQUESTED FROM THE REPUBLICS

In order to carry out the 'Studies' section of the Terms of Reference (TOR 3.2 pp 7/8) it is necessary to obtain detailed data relating to vehicle ownership and type.

The research institute NIIAT in Almaty were commissioned early in the project to carry out a trial data collection in Kazakhstan.

This was designed to establish what data was available prior to requesting it from all of the Republics. As detailed elsewhere, availability was limited by its classification as a 'State Secret'. Clearance to release the data was finally received in June 1996.

In order to ensure consistency and in an attempt to accelerate collection of the remaining data, the data headings provided by NIIAT (via Goskomstat) were circulated to the other republics at the Almaty seminar. In each case, these were given to the Ministry of Transport delegate.

At the time of writing, we have received data from Kyrgyzstan and Uzbekistan but have not verified the returns. The remaining republics (Tajikistan and Turkmenistan) are all still awaiting clearance and help is requested from Tacis elsewhere in this document (section 4.3).

The headings requested are:

Table 1:	For each oblast Vehicles owned by state, JS Enterprises and Private
Table 2:	For each oblast Vehicles owned and operated for hire and reward by State, JS Enterprises and Private.
Table 3:	For each oblast Number of vehicles by manufacturer and model, registered and in use. Note : This is a five year survey and related to 1992
Table 4:	For each oblast Vehicles by carrying capacity.
Table 5:	For each type of driver licence Number issued to State, JS Enterprise and Private
Table 6:	For each manufacturer and model of truck Carrying capacity and number of axles
Table 7:	For each oblast Number of trucks for each defined body type
Table 8:	For each oblast Number of trucks in each age group <3 yrs, 3-8 yrs, 8-10 yrs, 10-13 yrs, 13+yrs
Table 9:	For each oblast Distances travelled by trucks and fuel consumed
Table 10:	Vehicle utilisation statistics for organisations reporting to Ministry of Transport

Table 11:	For each oblast Operational cost summaries for all vehicles by type of fuel consumed
Table 12:	For each oblast Number of trucks run by type of fuel consumed
Table 13:	For each oblast Operating cost summary by type of commodity moved
Table 14:	For each oblast List of former Ministry of Transport organisations including number of trucks and type of property
Table 15:	For each size group of enterprise Number of enterprises, number of trucks, number of light goods vehicles

ANNEX C

CORRESPONDENCE REQUESTING RELEASE OF DATA

The Tacis Traceca improvement of road services project

28 June 1996

Ministry of Transport
of Tadjikistan
Minister
14, Ayni St.,
Dushanbe, 734042

Dear Mr. Mukhitdinov:

Our project "Improvement of Road Services" has an on going commitment to data collection. This is necessary to understand the current situation within the trucking industry. A fundamental part of this data are trucks by year of manufacture, owner, model, manufacturer and carrying capacity, goods carried and their origin and destination.

We have been informed by other Central Asian republics that such information is available but constitutes a state secret.

Could you please confirm if this is the case in your country. If this is the case we request your authorisation to the relevant authorities in order that this information can be released.

Sincerely,

Alex Boulting
Transport Economist

Project Management Sir Alexander Gibb & Partners Ltd.
Address 76/109 Abay Av. 480057, Almaty, Republic of Kazakhstan
Tel +7 (3272) 42 84 18, 67 96 73
Fax +7 (3272) 42 48 47

The Tacis Traceca improvement of road services project

28 June 1996

The Cabinet of Ministers
of Turkmenistan
Head of Transport &
Communications Department
Gogol str., 17
Ashgabat

Dear Mr. Yazberdiev:

Our project "Improvement of Road Services" has an on going commitment to data collection. This is necessary to understand the current situation within the trucking industry. A fundamental part of this data are trucks by year of manufacture, owner, model, manufacturer and carrying capacity, goods carried and their origin and destination.

We have been informed by other Central Asian republics that such information is available but constitutes a state secret.

Could you please confirm if this is the case in your country. If this is the case we request your authorisation to the relevant authorities in order that this information can be released.

Sincerely,

Alex Boulting
Transport Economist

Project Management Sir Alexander Gibb & Partners Ltd.
Address 76/109 Abay Av. 480057, Almaty, Republic of Kazakhstan
Tel +7 (3272) 42 84 18, 67 96 73
Fax +7 (3272) 42 48 47

3

The Tacis Traceca improvement of road services project

1 May 1996

To the Premier Minister Deputy
of Republic Uzbekistan and
Chairman of Goskomstat
Mr. Ismailov

Dear Mr. Ismailov Uktam Kuchkarovich:

Our project "Improvement of Road Services in Central Asia" is currently in the first phase of development. This phase consists of data collection in order to understand the current situation within the trucking industry. A fundamental part of this data is data on trucks by year of manufacture, owner, model, manufacturer and carring capacity.

We have bean informed in Goskomstat and "Uzautotrans" Corporation that such information is available but constitutes a state secrete

Could you please confirm if this is the case. If this is the case we request your authorisation to the relevant authorities in order that this information can be released.

Sincerely,

Alex Boulting
Transport economist

Project Management Sir Alexander Gibb & Partners Ltd.
Address 76/109 Abay Av. 480057, Almaty, Republic of Kazakhstan
Tel/Fax +7 (3272) 42 84 18

3

Tacis

The Tacis Traceca improvement of road services project

1 мая 1996 года

Заместителю Премьер Министра
Республики Узбекистан
Председателю Госкомпрогнозстата
Г-ну Исмаилову У.К.

Уважаемый г-н Исмаилов Уктам Кучкарович:

В настоящее время наш проект "Улучшение дорожно-транспортного обслуживания в Центральной Азии" находится на первом этапе своей деятельности. На данном этапе проводится сбор данных для того, чтобы мы имели представление о сложившейся ситуации в транспортном секторе в этих странах. Основное значение играет информация о грузовом транспорте, а именно: год выпуска, в чьей собственности находится машина, модель, производитель и грузоподъемность.

В Госкомпрогнозстате и Корпорации "Узавтотранс" нам сказали, что такая информация является государственным секретом и для ее раскрытия необходимо разрешение.

Не могли бы Вы подтвердить достоверность такого заявления, и если это так, тогда мы убедительно просим Вашего участия в решении возникшей проблемы; а именно, нам необходимо Ваше письмо-распоряжение в соответствующие органы для раскрытия интересующей нас информации.

С уважением,

Алекс Боултинг
Транспортный Экономист

Project Management Sir Alexander Gibb & Partners Ltd.
Address 76/109 Abay Av. 480057, Almaty, Republic of Kazakhstan
Tel/Fax +7 (3272) 42 84 18

ANNEX D

ANALYSIS OF VEHICLE SUPPLY DATA FOR KAZAKHSTAN

ANALYSIS OF KAZAKHSTAN DATA

INTRODUCTION

This annex contains an initial analysis of vehicle supply data for Kazakhstan and is included to demonstrate the minimum which will be achieved for each republic, providing the data is made available.

The picture emerging reflects a Central Asian republic in an immediate post-privatisation period and will form a useful comparison with the situation in the other republics which are yet to commence privatisation.

We have some concern over the data relating to vehicle body type. The analysis (see page XX) shows that 44% of the Kazakh vehicle fleet are `tippers' - including more than 30% of the fleet in Almaty City.

We believe that this may reflect a problem with translation and are currently checking these figures.

PROGRESS REPORT - COMMERCIAL VEHICLE SUPPLY AND DEMAND

KAZAKHSTAN

Introduction

The data analysed in this report has been collected by NIIAT and applies to the whole of Kazakhstan. The data was obtained through Goskomstat and is the result of an annual operator's survey.

Most of the data relates to December 1994. The exception to this is that relating to vehicles by make and model. This data is collected only every 5 years and the data supplied relates to 1992.

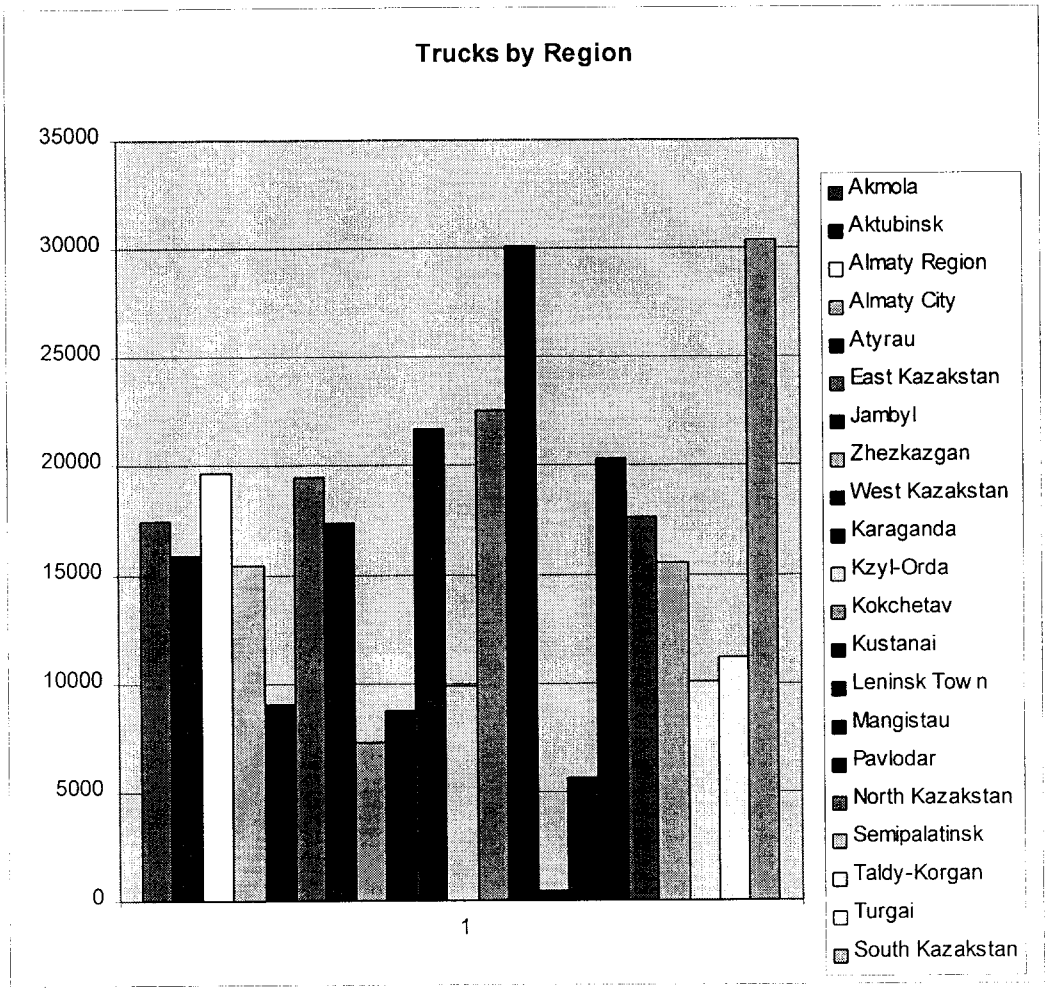
Number of Trucks in Kazakhstan by Region

The data showed both the number of vehicles registered in Kazakhstan and the number of vehicles in operable condition. Depending on the tables used, the proportion of the listed fleet which was in operable condition was in the region of 82% in 1992 (using the vehicles by make survey) but in 1994 (using the vehicles by body type data) the proportion of listed vehicles that were operable had appeared to have fallen to around 73-75%. Because of the different surveys being used, it has not been possible to establish for certain whether the proportion of the fleet that is operable has definitely fallen.

A significant amount of work was undertaken validating the data. There were a number of instances where the number of trucks in particular categories did not add up to the total of either operable or inoperable vehicles, but was a figure between the two. We believe that these discrepancies are the result of the fact that Goskomstat does not go back to the operators to query such information, but merely adds up the data provided.

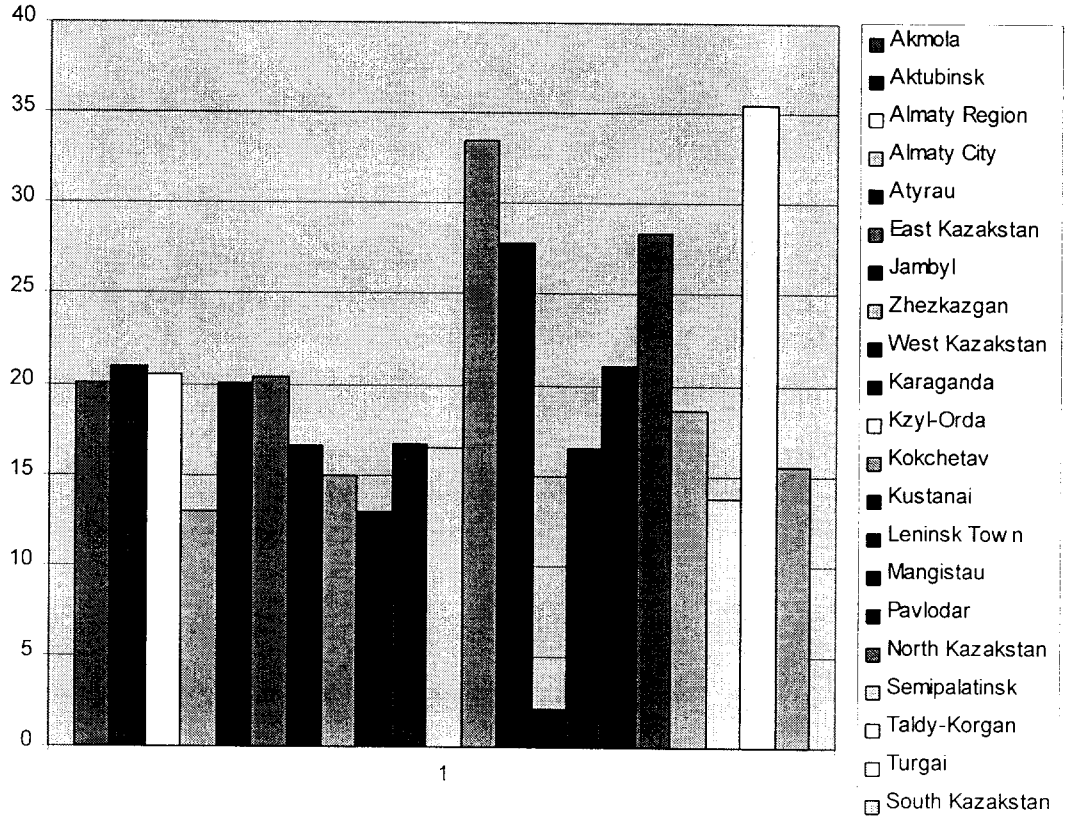
Following advice from NIIAT we have used the total number of vehicles registered as the basis for the analysis, rather than the number of operable vehicles. Our analysis has shown that the ratio of total and operable vehicles appears to be fairly constant between different makes and body types.

The national total of trucks listed in Kazakhstan in 1994 was 325,000, and the regional distribution was as shown overleaf.



The largest concentrations of trucks by region are in South Kazakhstan (30,300, 9.3% of national total) and Kustanai (30,100, 9.2% of total), Kokchetav (22,500, 6.9% of total) and Karaganda (21,700, 6.6% of total). The lowest concentrations of vehicles were found in Leninsk Town (420 trucks, 0.13% of total), Mangistau (5,600 vehicles, 1.7% of total) and Zhezgagen (7,300 trucks, 2.2% of total). This partly reflects the population structure where logically the largest and most densely populated areas would be expected to have more commercial vehicles than a small, thinly populated region.

Trucks per Thousand People



In an attempt to relate the absolute number of trucks to the size of each region, the number of trucks per thousand people was then considered.

For Kazakhstan the average number of trucks per thousand people works out as 19 with a standard deviation of 3.17. Therefore this demonstrates a reasonably consistent figure across the whole country. However, there are some significant variations.

The regions where the number of trucks per thousand people is significantly above average are Turgai (35), Koketchev (34), and Kustanai (28). These are adjoining regions in the north of Kazakhstan.

Regions where the number of trucks is significantly below average are Leninsk Town (2), Almaty City (13) and West Kazakhstan (13). Both Leninsk and Almaty City are urban administrative areas, and therefore the number of trucks per thousand people would be expected to be low.

Further information is required on the type of industries found in different parts of Kazakhstan to derive a relationship between this and the truck population. This will also influence the type of vehicles (e.g. size and body type) operating in each region.

Analysis of Ownership pattern by Region

The survey identified the ownership pattern of trucks in terms of state ownership, mixed ownership (i.e. joint stock companies) and private ownership.

The national pattern of vehicle ownership is State 52%, Mixed 18%, Private 30%.

However, there are significant variations in patterns of ownership by region.

Private ownership is very much higher than average in Turgai, (52%) Semipalatinsk (51%), South Kazakhstan (39%), Kustanai (46%) and North Kazakhstan (45%) regions.

State ownership is significantly above average in Akmola (83%), Karaganda (68%), and Pavlodar (84%) regions.

The above may, in fact, reflect the progress of privatisation, rather than a pattern that certain types of ownership differ from others. More information is required on the policy of the Kazakhstan government on privatisation by region. For example, if the government has had a privatisation program where some regions have been privatised before others this will have influenced the above results.

Average fleet size by ownership by region

At national level, on average, state owned fleets (152 vehicles) are larger than mixed (113 vehicles) or private ownership (105 vehicles).

It would therefore appear that there is no significant difference in fleet size between mixed ownership and private ownership.

However, significant regional differences to the national averages are:

In Akmola region, mixed ownership fleets are the largest (average 130 vehicles compared to 95 for state and 68 for private).

In Aktubinsk region private fleets are the largest (average 235 vehicles compared to 83 for state and 105 for mixed ownership).

In Karaganda region, mixed fleets are the largest (average 338 vehicles compared to 193 for state and 135 for private).

Truck Population by Make

Analysis of the data collected indicates that at a national level the makes of vehicle currently registered in Kazakhstan are as follows:

Belaz	1.0
Gaz	32.8
Kamaz	20.8
Kraz	1.9
Maz	2.3
Uaz	3.2
Ural	0.7
Zil	27.3
Other	10.0
Private	0.0
TOTAL	100.0

Important regional variations are:

	National	Almaty City	Zhezgazgen	Karaganda	Leninsk	Mangistau	Turgai
Belaz	**1.0**	0.1	14.5	2.0	0	5.1	0.8
Gaz	**32.8**	18.9	21.1	24.2	38.4	22.0	40.5
Kamaz	**20.8**	18.0	30.5	25.4	14.3	17.4	22.0
Kraz	**1.9**	2.7	6.3	2.7	0	6.3	0.6
Maz	**2.3**	5.6	3.5	2.4	3.6	5.0	0.6
Uaz	**3.2**	5.0	0.4	3.1	8.9	2.3	2.3
Ural	**0.7**	0.3	0.7	0.7	0.9	1.8	0.8
Zil	**27.3**	38.0	20.7	25.5	30.4	31.7	26.8
Other	**10.0**	11.4	2.3	13.7	3.6	8.3	5.5
Private	**0**	0	0	0.3	0	0	0
TOTAL	**100**	100.0	100.0	100.0	100.0	100.0	100.0

The market share of Zil is more constant than the other manufacturers across all regions.

Notable differences are Almaty City where Gaz market share is much lower than the national average and the market shares of Maz, Uaz and Zil are significantly above the national average.

In Zhezkazgen Region, Belaz, Kamaz and Kraz have market shares above average, whereas Gaz and Zil have market shares below average.

In Karaganda Region Belaz and Kamaz have a share above average, with Gaz significantly below.

In Leninsk, Gaz and Uaz have a market share above average whereas Kamaz is significantly below.

In Mangistau, the proportion of trucks of Belaz, Kraz and Maz manufacture is above average, with Gaz significantly lower than the national average.

This pattern is likely to reflect the fact that manufacturers specialise in certain sizes or configurations of vehicle e.g. Belaz in tippers and Kamaz in larger trucks and therefore the manufacturer profile for each region would tend to reflect the size and body configurations found in that region.

From the data provided, there are no significant differences in the proportion of vehicles that are in operating condition from one make to another. This would suggest that any problems with vehicle maintenance and lack of spare parts apply across all makes of truck.

Truck population by load capacity by region, in number and in %

Conclusions:

National average carrying capacity is:

	up to 1499kg	1500-4999kg	5000-6999kg	7000-9999kg	10000-14999kg	over 15000kg
Kazakhstan	7.1%	48.2%	20.5%	12.1%	10.8%	1.4%

The most significant regional variations are:

Region	up to 1499kg	1500-4999kg	5000-6999kg	7000-9999kg	10000-14999kg	over 15000kg
Almaty City	11.6%	36.3%	24.2%	11.5%	13.8%	2.6%
Zhezkazgan	6.4%	36.1%	20.9%	12.9%	18.3%	5.3%
Karaganda	7.2%	39.5%	20.6%	14.0%	15.6%	3.1%
Leninsk	3.9	25.1	43.4	17.7	6.6	3.3
Mangistau	3.6	33.0	27.1	14.4	20.4	1.4
Turgai	11.1	47.9	24.4	14.8	1.8	0

Almaty City: more small vehicles and more large vehicles than average
Zhezgazgan region: less small, more large
Karaganda region: less small, more large
Leninsk: fewer small (up to 4999kg); more medium (5000-9999kg); less large (over 10,000kg)
Mangistau region: significantly more large vehicles than average, 10000 to 14999kg
Turgai region: no vehicles with carrying capacity over 15,000 kg

Vehicle population by type of body construction

For Kazakhstan as a whole, the truck population by type of body is:

Tippers	44.0%
Drop side "open case"	32.0%
Tankers	12.0%
Vans	11.0%
Refrigerators	1.0%
Lumber trucks	0.3%.

Once again, significant variations are found to the national figures. The most significant are:

	Open	**Tippers**	**Vans**	**Fridges**	**Tankers**	**Lumber**
National	**32**	**44**	**11**	**1**	**12**	**0.3**
Almaty City	34	35	23	1	7	.0.1
Atyrau	38	34	9	1	17	0.8
Kzly-Orda	38	40	7	0.6	14	0.5
Kustanai	28	49	11	0.6	10.9	0.2
Leninsk	43	33	11	5	9	0
Mangistau	40	36	6	1	17	0.1
North Kazakhstan	27	49	11	0.5	12	0.1
Turgai	27	50	6	0.5	16	0.2

The significant concentrations of vehicles by body type are therefore:

Tippers in Kustanai, North Kazakhstan and Turgai Regions

Vans in Almaty City

Fridges in Leninsk

Tankers in Atyrau, Mangistau and Turgai Regions

Vehicle carrying capacity:

The national averages for vehicle carrying capacity are:

		standard deviation
Dropside/open case	5.2te	0.01te
Tippers	6.4te	0.26te
Tankers	4.2te	0.34te
Vans	2.5te	1.02te
Fridges	6.1te	0.25te
Lumber trucks	9.8te	5.27te

The fleet is, in general, reasonably close to the averages with the notable exception of lumber trucks. Vehicle carrying capacity is low by western standards.

Significant regional differences from the national averages are:

Fridges in Almaty City	10.1te compared to average 6.1te
Tankers in Almaty City	5.4te compared to average 4.2te
Tippers in Zhezkazgan	10.4te compared to 6.4te
Tippers in Karaganda	8.2te compared to 6.4te
Tankers in Mangistau	6.0te compared to 6.0te
Fridges in North Kazakhstan	3.4te compared to 6.1te
Lumber in South Kazakhstan	15.4te compared to 9.8te

Vehicle fleet by age by region.

In numbers and each region split by percentage

National averages:

	up to 3 yrs	**3.1 to 8 yrs**	**8.1 to 10yrs**	**10.1 to 13 yrs**	**13.1 yrs and over**
Kazakhstan	**17.6%**	**45.6%**	**16.8**	**10.2**	**9.7**
Almaty City	35.2	7.5	23.9	15.8	17.5
Turgai	26.1	50.1	13.0	6.8	4.0
South Kazakhstan	12.9	42.4	18.7	13.4	12.6

The most significant regional differences are:

Almaty City and Turgai Region have significantly more vehicles less than 3 years old than the average.

Almaty City has more vehicles less than 3 years old (35% of fleet compared to national average 17%). However, the proportion of the fleet which is between 3.1 and 8 years old is very much below average (7.5% compared to 45%). The proportion of the fleet which is over 8 years old is significantly higher than the national average (57% compared to a national average of 37%). No reason for this pattern is known, but it could be that companies which operate countrywide concentrate their newest vehicles on high profile operations in Almaty for the first 2 or 3 years of their life, cascade them to the regions outside the capital until around 8 years old, then bring them back to the capital to end their lives operating on the secondary work in Almaty.

South Kazakhstan Region has an older truck fleet than the average, with 44% of its fleet over 8 years old compared with a national average of 37%.

Turgai region has a newer fleet than the average, with 76% of its fleet less than 8 years old compared to a national average of 63%.

ANNEX E

PRELIMINARY ANALYSIS OF AUTOMOTIVE PARTS AND SERVICE DATA

PRELIMINARY ANALYSIS OF AUTOMOTIVE PARTS AND SERVICES DATA (TOR 3.2.2 P8)

INTRODUCTION

In order to test data collection possibilities, NIIAT in Almaty and TADI in Tashkent were commissioned to study the situation in their respective republics.

This has turned out to be a relatively difficult and time-consuming exercise in both republics as the information required is of a secondary nature, that is, it is not available through Goskomstat.

The reports from each organisation are shown here and similar research is being done in the other republics. Full analysis will be included in the Final Report.

ANNEX E.1

UZBEKISTAN

INTRODUCTION

The aim of this work is to form a correct estimate of situation of road transport service in Uzbekistan. This investigation was based on the collection of secondary marketing information both by phone interview & by private contacts with directors of companies and firms.

This investigation is including information concerning dealers of vehicles; distribution of spare parts; condition of the service stations; on - road service stations; additional transport centres and freight forwarding companies.

The following market research can be done by our group out of order and on the base of previous information: survey - observation - experiment. Grounding on the analysis of the market's state forecast can be done on region's demand in transport vehicles, spare parts, tires.

2.1. INDEPENDENT SERVICES
2.1.1.DEALERS FOR TRANSPORT VEHICLES

2.1.2. a) JSC ' KAMAZ - Centre' since 1974 is an official dealer of Kamsky plant on the territory of Uzbekistan is located in the following towns: Tashkent, Dzhizak, Samarkand, Karshi, Bukhara, Termez, Urgench, Nukus, Kokand. Today the biggest servicing stations are located in Tashkent and Samarkand (their capacity is 8-10 vehicles per day).

2.1.1. b) JV 'UzbekMAZservice' is also joint Uzbek - Belorus venture. It was established in 1991 in Tashkent. During 1995 by this firm was sold 150 vehicles MAZ, 100 tractors and excavators (type 'Borex').

2.1.2. c) Also was opened the following servicing stations:

Servicing station ZIL is located in Tashkent, Samarkand, Urgench.

Servicing station BELAZ is located in Tashkent region, in Angren town at the transport JSC 'Uzbekugol'.

Servicing station GAZ is located in Tashkent region , in Anrgen town at the centre ATP N:72.

Servicing station KRAZ is located in Tashkent region, in Yangiul town at the centre 2503, is organised together with Republic of Georgia.

Servicing stations ZIL, GAZ, KRAZ, BELAZ, KAZ at this time practically are not dealing with transport vehicles delivery. The main activity of above centres is delivery of spare parts and tyres and also maintenance.

These problems are connected with temporary absence of intergovernmental agreements on problems of convertibility, operations with cash money and high customs taxes for transport vehicles. In this connection both big and small dealers have reduced commercial delivery of vehicles and spare parts on the market of Uzbekistan.

2.11.1. DEFINITIONS

Efficiency of the process of delivery consists in the terms of transport vehicles delivery starting from the day of order till the moment of delivery.
The problem of efficiency depends on precise working out of marketing plan which is based on the demands and offers of the necessary quantity of transport vehicles, definitions of fleet, and also prediction of the future fleet development both commercial and state types. It should be taken into consideration : age of fleet, regional differences, economical situation of the suppliers and clients.
For example, at this moment there are 35 000 units of trucks KAMAZ , 10 % from them belongs to 'Uzautotrans' corporation (3341 units of and trailers, 982 units of trucks MAZ -) 50% belongs to Ministry of Construction etc.
Till the present moment in Uzbekistan there was not organised a market research on macro level, which can permit to definite the following problems:

- technical service and trade network development;
- mastering of potential and export markets
- construction of motorways and service centres;
- organisation of fuel lubricants material industry
- organisation of main branches on the raw materials;
- organisation of research basis
- training;
- financial system of customers' stimulation;

2.1.2. DISTRIBUTION OF SPARE PARTS

The biggest suppliers of spare parts are: Belorus plants, Russian plants, Ukraine plants, for example MAZ, BELAZ, KAMAZ, ZIL, KRAZ.
There are some data concerning main and common dealers for delivery of motorcars, spare parts, and tyres.

Table 1

Joint Uzbek-Belarus venture 'UzbekMAZ-Service'

Name and type	Description	Price in SUM	Pric
Fuel tanker ATZ-10K	Aviation fuel tanker, 10000L.	2,100,000	
Hauler MAZ-54329-020 with semi-trailer MAZ-9330	Engine YAMZ-238-2M, 300 H.P., 2 Axles, cab MAN(luxury), permissible axle load - 25 T.	3,200,000	
Trailer MAZ-83781	Length 8 m, permissible axle load is 14 T., 2 axles, metal doors, curtains	1,100,000	
Excavator 'Borex'on the base of UMZ	Rachyek', 62 HP	1,200,000	
Engine YAMZ-238-2M	KRAZ diesel	350,000	
Engine D-245	ZIL tractor diesel	180,000	
Engine D-243	Tractor diesel	140,000	
Tractors YUMZ	Capacity 62 HP, load capacity 6,1 T	800,000	–

Common Dealers for Delivery for Tyres for Trucks.

Table 2

Main Dealer Name	Type of Tyres
1. PSE* 'Bayram-Hazy' tel. 67 07 76 63 91 11	Tyres of different modification
2. JSC Usautotransbutlash tel 68 84 76 68 84 29	Tyres of all types
3. Private firm 'Fatina' 52, Dagestanskaya str. # 2 tel. 68 71 88 35 20 93	Tyres for trucks MAZ KamAZ
4 Firm 'Hasida' 15, Chilanzarskaya str. Tel. 77 27 98 77 34 17	Tyres 290 x 508
5. Firm Transservice 40, Zhurabek Asanov str. Tel. 90 26 71 90 69 80 92 04 07	Tyres 320 x 508
6. PICE** 'Vesta - N' tel. 41 58 36 41 28 02 41 09 64	Tyres of all modifications
7. Firm 'Ekogeot' tel. 36 00 45 68 56 41 68 16 41	Tyres
8. PE*** Ulmuzied tel. 45 76 60 45 85 56 45 19 57 45 49 52	Radial tyres for KamAZ

* Private Small Enterprise
** Private Industrial - Commercial Enterprise
*** Private Enterprise

Common Dealers for Deliveries of Spare Parts for Trucks

Mane Dealer Name	Type of Spare Parts
1. JSC Uzautotransbutmash tel. 68 84 15 68 84 23 68 84 29	accumulators
2. JSC UzASK 'Yulovchi' tel. 54 93 07	accumulators
3. Firm 'Albaks' 68 A, Mirakilova str. tel. 55 54 37 54 65 81	engine KamAZ, MAZ, KrAZ
4. tel. 50 99 67 90 31 79	spare parts for KamAZ, MAZ, Ural
5 PICE* 'Vesta - N' tel. 41 58 36 41 28 02 41 09 64	engine unit for MAZ - 236, MAZ - 238
6. Firm 'Kayrakum' 11 A, Shevchenko str.	fuel equipment for trucks ZIL, GAZ, MAZ, KamAZ
7. Firm 'Agat' General Petrov str., Institute of Improvement, 8 floor, room 11 tel. 68 26 51 68 04 93	
8. PICE 'Atea' LTD tel. 92 26 47 90 35 18 fax 90 35 18	spare parts for trucks KamAZ, KrAZ
9. SE** TashINZHTEH 11 A, micro district Karasu-4 tel. 65 03 52 65 03 58	triplex wind shield for KamAZ
10. Firm 'Ekogeot' tel. 36 00 45 68 56 41 68 16 41	accumulators

* Private Industrial - Commercial Enterprise
** Small Enterprise

Productive Business Company 'I - VEST - O'
(Private Industrial - Commercial Enterprise)

Spare Parts

1. Synchronizer - 50
2. Synchroniser - 51
3. Block head gasket 238
4. Block head gasket 238
5. Sprayer 26-III2II0
6. Sprayer 26I-III2II0
7. Camshaft 240
8. Camshaft gear 236
9. Nacelle engagement
10. Head of block
11. Plunger pairs 60-III07310

SPECIFICATION OF MAIN SPARE PARTS DELIVERED BY TOPAZ JS COMPANY

N DESCRIPTION

1. Bush-Piston set
   236-1004008B
   238NB-1004008

2. Connecting rod
   236-1004045B2

3. Set of rings
   236-1004002

4. Bent shaft with bushing
   236-1000107B4
   238-1000107B4
   238-1000107A

5. Block head gasket
   236-1003210B2
   238-1003210B2

6. Set of traction steering
   238NB-1118010G
   240N-118010B

7. Gear
   2384-1701129 (5 speed)
   236-1701131 (3 speed)
   236-1701112 (1 speed)

8. Synchroniser
   236-1701150B2
   236-1701151A

9. Gear box
   236P 17000036
   236N 1700003

10. Sprayer
    26-11121110
    261-11121110

11. Feed pump
    236-1106210
    240-1106210

12. Sprayers

13. Oil pump
    236-1002012-23

14. Plunger pairs
    60-111073-01
    60-1111074-01

Main Dealers for Deliveries of Trucks

Dealer Name	**Model**
1. JSC ASK 'Yulovchi' tel. 54 93 07	Trucks KamAZ, MAZ, KrAZ
2. Firm 'Albaks' 68 A, Mirakilova str. tel. 55 54 37 54 65 81	KamAZ, MAZ, KrAZ
3. Firm 'Ivanovskaya Marka' tel. 53 92 51 55 73 10	MAZ, KamAZ

2.1.3. SERVICING STATIONS FOR VEHICLES

2.1.3.1. Full-working centre in Uzbekistan is JV 'Autocentre - KAMAZ', the official dealer of Kamsky plant in Uzbekistan.
'Autocentre - KAMAZ' is located in the following towns: Tashkent, Nukus, Dzhizak, Samarkand, Karshi, Bukhara, Termez, Urgench, Nukus, Kokand.
The main activity: guaranteed maintenance, spare parts providing, sale and service.
Capacity : 8 - 10 vehicles per day.
This centre is completely automated and mechanised according to the up-date demand.
The total warehouse area, equipped by shelves and lifting machinery is 400,0 sq.m.; it is had open parking area; total amount of employees is 84 persons.
For approach and exit road it is built bridges.
About 35 000 KamAZ trucks in Uzbekistan, main quantity of which are serviced in Tashkent.
In servicing centre KamAZ in Tashkent and Samarkand they have special vehicles for trucks service on the motorways, where is making small repair works and maintenance.

2.1.3.2.For haulage trucks.
At JV 'Shark-Yulduzi', which is located in Tashkent, 'Sergeli' district and which services mainly passenger cars is organised servicing post for haulage trucks Mercedes-Benz.

2.1.3.3.On the firm 'Yurta Osie Trans' is constructing near way servicing station of 20 posts, motel, terminals and secured parking area. At this moment this servicing station is equipped for 30% only.

2.1.3.4.Besides in Tashkent Transport Institute (TTI) is worked out projects for reconstruction of existing transport vehicles companies into on road servicing stations freight forwarding companies functioning on the main motorways to Tadzhikistan, Kyrgyzstan, Turkmenistan, Kazakhstan, in the following towns: Baysun, Dzhizak, Guzil, Karshi, Samarkand, Bukhara, Termez, Baysun, Hujent, Gulistan, Kokand, Fergana, Andizhan.
Also TTI recommends to organise trade network of spare parts and service posts in all on road servicing stations.

2.1.4.On road servicing stations.
On road servicing stations for trucks are absolutely absent in Uzbekistan.
In TTI is worked out technical projects for construction of on road servicing stations, which till this day did not have practical use due to the economical situation of vehicle market in Uzbekistan.

2.1.5. Auxiliary buildings
Some data concerning auxiliary building is given in table N:3.

2.2. COMMERCIAL SERVICING

2.2.1.JSC, JV dealing with trucks and having full private (commercial) form of property are absent.

2.2.2.Expeditionary companies.
Expeditionary companies dealing with expeditionary works are practically absent. They are making combined works, including transport and freight forwarding service.
Companies, making international transportation:

- 'Urta Osie Trans' (Europe, Asia)
- 'Uzintrans' (Chine, Austria, Afghanistan, Russia)
- 'Covtransauto', Termez (Afghanistan, Iraq, Turkey, Pakistan, CIS countries)
- 'Uzautopromtrans' (at 'Uzautoprom' association, specialised on spare parts transportation for DAEWOO and other companies)
- Joint Uzbek - Afhganistani trading - transport venture 'Uzafghantorgtrans' (establishing)
- Joint Uzbek - Russian - Austrian transport venture 'Uzkamko' (establishing)

From above companies only one - 'Urta Osie Trans' has licence of international transport unit for international transportation.
The rest companies is providing international transportation after receiving single licence from Russian unit.

Main companies providing interstate transportation manly on the territory of CIS countries:

- ñ JSC 'Uzmezhtrans' (includes 3 service posts in Tashkent, Samarkand, Andizhan)
- ñ JSC 'Uzplodovoshtrans'
- ñ 'Uzstroytrans'
- ñ 'Uzvodvneshtrans', at 'Uzvodhoz' corp., Tashkent
- ñ 'Uzselhoztrans' and many others small companies and firms.

Internal transportation is provided by all above companies, except 'Yurta Osie Trans'.

Types of Transported Goods

Export : cotton fibre, cotton, cereals, cable, ferrous metals, mineral fertilisers, agricultural products (fruits, vegetables, cans).
Import : consumer goods, food, tubes, rolled metals, tyres, spare parts, oil products, timber etc.

Former and excising state expeditionary companies 'Uzmezhtrans'

1. Transport - expeditionary company, Tashkent.
2. Transport - freight forwarding complex, ATEC, Bukhara.
3. Transport - freight forwarding complex, ATEC, Andizhan.
4. Transport - freight forwarding complex, ATEC, Samarkand.
5. Transport - freight forwarding complex, ATEC, Tashkent.
6. Transport - freight forwarding complex, ATEC, Angren.
7. Transport - freight forwarding company, Almalyk.

2.1.4.On road service stations

1. At this moment in 15 km. from Samarkand in Navoyi direction is functioning small motel with secured parking and repair shops for repair of transit lorries and trailers.
2. At the approaches to Uzbekistan from Turkmenistan is completing the centre for transit lorries and trailers, carrying cargo to Uzbekistan. This centre includes check-point, motel, secured parking, filling station, service, and wholesale market for purchasing of delivered goods and its further distribution in the towns of Uzbekistan.

To give an exact estimation of above objects it is necessary to make their inspection.

Table 3

N : Name of Enterprises 'Tashgorgruztrans' concern, Tashkent	Auxiliary buildings				
	Storage	Car Port	Offices	Night Accommodation for drivers	Open parking
1. Transport Enterprise N1, Tashkent	+	+	+	+	+
2. Automobile complex N3, Tashkent	+	+	+	+	+
3. State JSC N127, Tashkent	+	-	+	-	+
4. Transport Enterprise N143, Tashkent	+	-	+	-	+
5. Rented work shop N2502, Tashkent	+	-	+	-	+
6. Work shop N2502, Tashkent	+	-	+	-	+
7. Work shop N2512, Tashkent	+	-	+	-	+
8. Work shop N2515, Tashkent	+	-	+	-	+
9. Work shop N2551, Tashkent	+	-	+	-	+
10.Pioneer camp after Streltsov, Ahangaransky region, Beshkul vlg.					
11.Self-supporting industrial enterprise, Tashkent					
12.Transport Enterprise N142, Tashkent	+	-	+	-	+
13.Transport Enterprise N145, Tashkent	+	-	+	-	+
14.Small Enterprise 'Sharaf'					

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Uzmezhautotrans', Tashkent	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1.Transport - freight forwarding Enterprise, Tashkent	+	-	+	-	+
2. Transport - FF Complex, Bukhara	+	-	+	-	+
3. Transport - FF Complex, Andizhan	+	-	+	-	+
4. Transport - FF Complex, Samerkand	+	-	+	-	+
5. Transport - FF Complex, Tashkent	+	-	+	-	+
6. Transport - FF Complex, Angren	+	-	+	-	+
7. Transport - FF Complex, Almalyk	+	-	+	-	+
8. Small Enterprise 'Madad'	-	-	-	-	-

N: Name of Enterprise	Auxiliary buildings				
'Tashoblgruztrans' concern, Tashkent	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Transport Enterprise N2, Chirchik	+	-	+	-	+
2. Transport Enterprise N16, Bekabad	+	-	+	-	+
3. Transport Enterprise N46, Alimkent vlg.	+	-	+	-	+
4. Transport Enterprise N72, Angren	+	-	+	-	+
5. Transport Enterprise, N74, Toytepa	+	-	+	-	+
6. Transport Enterprise, N80, Almalyk	+	-	+	-	+
7. Transport Enterprise, N81, Soldatskoye	+	-	+	-	+
8. Transport Enterprise, N82, Pskent	+	-	+	-	+
9. Transport Enterprise, N121, Yangibazar vlg.	+	-	+	-	+
10. Transport Enterprise N122, Buka	+	-	+	-	+
11. Transport Enterprise N125, Gazalkent	+	-	+	-	+
12. Work shop N2503, Yangiyul	+	-	+	-	+
13. JV Tehcentre KRAZ	-	-	+	-	+

N: Name of Enterprise 'Tashoblgruztrans' concern, Tashkent	Auxiliary buildings				
	Storage	Car Port	Offices	Night accommodation for drivers	Open parking
1. Work shop N2534, Urgench	+	-	+	-	+
2. Transport Enterprise N43, Hanka	+	-	+	-	+
3. Transport Enterprise N67, Yangiaryk	+	-	+	-	-
4. Transport Enterprise N69, Koshkupyr	+	-	+	-	+
5. Transport Enterprise N79, Khiva	+	-	+	-	+
6. Transport Enterprise N93, Hazarapsky region, Saidlar vlg.	+	-	+	-	+
7. Transport Enterprise N96, Khazarasp	+	-	+	-	+
8. Transport Enterprise N87, Bagat	+	-	+	-	+
9. Transport Enterprise N9, Yangibazar	+	-	+	-	+
10.Fleet N13, Urgench	+	-	+	-	+
11.Taxi fleet, Urgench	+	-	+	-	+
12.Transport Enterprise N68, Gurlen	+	-	+	-	-
13.Transport Enterprise N99, Shavat	+	-	+	-	+
14.Transport Enterprise N126, Tuprakkalinsk	+	-	+	-	+
15.Training-industrial Transport Complex	+	-	+	-	+
16.Bus station, Urgench					
17.Bus-taxi fleet, Khiva					
18.Enterprise 'Khurmat'					

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Ferganatrans', Fergana	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Transport Enterprise N3, Fergana	+	-	+	-	+
2. TE N65, Kokand	+	-	+	-	+
3. TE N55, Kokand	+	-	+	-	+
4. TE N75, Tashlak vlg.	+	-	+	-	+
5. TE N78, Bagdad vlg.	+	-	+	-	+
6. Work shop N2504, Fergana	+	-	+	-	+
7. Work shop N2520, Kokand	+	-	+	-	+
8. Fleet N9, Fergana					
9. Fleet N10, Fergana					
10.Taxi fleet, Fergana					
11.Taxi fleet, Kokand					
12.Bus-taxi fleet, Tashlak vlg.					
13.Bus-taxi fleet, Margilan					
14.TE N24, Yaipan					
15.TE N53, Besharyk	+	-	+	-	+
16.TE N54, Rishtan	+	-	+	-	+
17.TE N66, Kuva	+	-	+	-	+
18.TE N73, Kuvasay	+	-	+	-	+
19.TE N11, Altyaryk vlg.	+	-	+	-	+
20.TE N123, Buvaidinsky refion, Yangikurgan vlg.	+	-	+	-	+
21.TE N64, Fergana	+	-	+	-	+
22.Akhunbabaev Transport Enterprise N158					
23.Regional bus stations and parking unit, Fergana					
24.Regional bus stations and parking unit, Kokand					
25.TE N51, Yazyavan vlg.	-	-	+	-	+
26.Ychkuprik Transport Enterprise N51, Yazyavan vlg.	-	-	+	-	+
27.TE N151, Sokhsky region, Sokh vlg	-	-	+	-	-
28.Mindonabadsky fleet, N26	-	-	+	-	+
29.TE N153, Furkatsky region, Gorsky vlg.	+	-	+	-	+

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Havoyitrans', Navoyi	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Bus fleet N23, Navoyi					
2. Transport Enterprise N106, Kanimekh vlg.	+	-	+	-	+
3. Transport Enterprise N34, Navoyi	+	-	+	-	+
4. Transport Enterprise N118, Kzyltepa	+	-	+	-	+
5. Bus - taxi fleet, Navoyi	+	-	+	-	+
6. Transport Enterprise N49, Zeravshan	+	-	+	-	+
7. Bus station, Navoyi	+	-	+	-	+
8. Transport Enterprise N18, Nurata					
9. Khatyrchinsky Transport Enterprise N156, Yangibulaj vlg.					
10.Khatyrchinsky bus station					
11.Industrial unit of bus stations and parking, Navoyi					

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Syrdaryatrans', Gulistan	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Transport Enterprise N52, Bakht	+	-	+	-	+
2. Transport Enterprise N71, Farkhad	+	-	+	-	+
3. Syrdaryinsky Work Shop N2513, Gulistan	+	-	+	-	+
4.Work Shop N2553, Gulistan	+	-	+	-	+
5. Syrdaryinsky bus-taxi fleet, Gulistan					
6.Rented bus fleet N25, Gulistan					
7.Ilyichezsky Transport Enterprise N60, Ilyichevsky region, research enterprise Nizhnevolynskoye	+	-	+	-	+
8.Saykhunabadsky Transport Enterprise N10	+	-	+	-	+
9. Transport Enterprise N124, Yangier	+	-	+	-	+
10.Transport Enterprise N45, Pakhtaabad vlg.	+	-	+	-	+
11.Regional Industrial Unit of bus stations and parking 'Guliston Autoshokhbekati', Gulistan					
12.Transport Enterprise N150, Bayaut vlg.					
13.Taxi fleet N9, Gulistan					
14.Dekhkanabadsky Transport Enterprise N70	+	-	+	-	+

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Uztransuslugi', Tashkent	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Enterprise 'Tashrogtransexpeditsiya', Tashkent	+	-	+	-	+
2. Ent. 'Tashobltransexpeditsiya', Tashkent	+	-	+	-	+
3. Ent. 'Karakalpaktransexpeditsiya', Nukus	+	-	+	-	+
4. Ent. 'Andizhantransexpeditsiya', Andizhan	+	-	+	-	+
5. Ent. 'Bukharatransexpeditsiya', Bukhara	+	-	+	-	+
6. Ent. 'Dzhizaktransexpeditsiya', Dzhizak	+	-	+	-	+
7. Ent. 'Kashkadaryatransexpeditsiya', Karshi	+	-	+	-	+
8. Enterprise 'Namangantransexpeditsiya', Namangan	+	-	+	-	+
9. Ent. 'Samarkandtransexpeditsiya', Samarkand	+	-	+	-	+
10.Ent. Surkhadaryatransexpeditsiya', Termez	+	-	+	-	-
11.Enterprise 'Horezmtransexpeditsiya', Horezm	+	-	+	-	+
12.Ent. 'Syrdaryatransexpeditsiya', Gulistan	+	-	+	-	-
13.Ent. 'Ferganatransexpeditsiya', Fergana	+	-	+	-	+
14.'Bakht' agency, Tashkent	+	-	+	-	+
15.Enterprise Karshinsky	+	-	+	-	+
16.Ent. 'Navoyitransexpeditsiya', Navoyi	+	-	+	-	+
17.Small Enterprise 'Khilol'	-	-	+	-	+
18.SE 'Madadkor' Chustransexpeditsiya, Namangan	+	-	+	-	-

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Bukharatrans', Bukhara	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Transport Enterprise N61, Bukhara	+	-	+	+	+
2. Transport Enterprise N139, Karakul	+	-	+	-	+
3. Work Shop N2524, Bukhara	+	-	+	+	+
4. work Shop N2533, Bukhara	+	-	+	+	+
5. Taxi fleet, Bukhara					
6. Transport Enterprise N27, Romitan	+	-	+	+	+
7. Transport Enterprise N97, Kagan	+	-	+	-	+
8. Transport Enterprise N137, Vabkent	+	-	+	-	+
9. Transport Enterprise N33, Gidzhuvan	+	-	+	-	+
10.Transport Enterprise N60, Shafrikan vlg.	+	-	+	-	+
11.Bus station , Bukhara					
12.TE N147, Sverdlovsky region, Zhondor vlg.	+	-	+	-	+
13.Department of management					
14.Self-supporting Small Enterprise 'Peshku'	+	-	+	-	+
15.Alatsky self-supporting Work Shop	+	-	+	-	+

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Surkhadaryatrans', Termez	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Transport Enterprise N47, Sherabad	+	-	+	-	+
2. Work Shop N2530, Shurchi	+	-	+	-	+
3. Termezsky Work Shop N2510	+	+	+	-	+
4. Work Shop N2516, Denau	+	+	+	+	+
5. Termezsky TE N8					
6. Bus-taxi fleet, Termez					
7. B-t fleet, Denau					
8. Transport Enterprise N48, Dzharkurgan	+	-	+	-	+
9. TE N104, Shargun	+	-	+	-	+
10.TE N110, Baysun	+	-	+	-	+
11.Angorsky TE N157	+	-	+	-	+
12.Termezsky bus station, Termez					
13.Small Enterprise 'Avtomobilchi'					

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Namangantrans', Namangan	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Transport Enterprise N22, Namangan					
2. TE N29, Yangikurgan					
3. TE N90, Turakurgan					
4. Work Shop N2523, Namangan					
5. Fleet N11, Namangan					
6. Fleet N17, Namangan					
7. Taxi fleet, Namangan					
8. Training and industrial complex					
9. Transport Enterprise N12, Pap					
10.TE N38, Uchkurgan					
11.TE N57, Chust					
12.TE N58, Naryn					
13.TE N86, Dzhumashuy vlg.					
14.TE N89, Kasansay					
15.TE N7, Chartak					
16.Bus station, Namangan					
17.Tashbulaksky TE N161					

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Dzhizaktrans', Dzhizak	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Work Shop N2517, Dzhizak	+	+	+	+	+
2. Transport Enterprise N28, Dustlik	+	-	+	-	+
3. TE N112, Pakhtakor	+	-	+	-	+
4. Taxi fleet, Dzhizak					
5. Bus-Taxi fleet N20, Dzhizak	+	-	+	-	+
6. Transport Enterprise N21, Gagarin	+	-	+	-	+
7. TE N26, Zaamin vlg.	+	-	+	-	+
8. TE N50, Galyaaral	+	-	+	-	+
9. TE N23, Dzhizak	+	-	+	-	+
10.TE N32, Bakhmalsky region, Usmat vlg.	+	-	+	-	+
11.Farishsky TE N111, Yangikishlak vlg.	+	-	+	-	+
12.Zafarabadsky TE N131					
13.Bus station, Dzhizak					
14.TE N133, Zarbdarsky region	+	-	+	-	+
15.Mardzhanbulaksky TE N149	+	-	+	-	+
16.Arnasaysky TE, N160, after Yulius Fuchik vlg.	+	-	+	-	+

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Kashkadaryatrans', Karshi	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Transport Enterprise N35, Shakhrisabz	+	-	+	-	+
2. TE N62, Dehkanabadsky region, Karashina vlg.	+	-	+	-	+
3. TE N76, Kitab	+	-	+	-	+
4. TE N85, Yakkabag	+	-	+	-	+
5. TE N92, Kasansay	+	-	+	-	+
6. TE N88, Kasbiysky region, Ylyanovsk vlg.	+	-	+	-	+
7. TE N98, Kamashi	+	-	+	-	+
8. TE N105, Chirakchi	+	-	+	-	+
9. TE N2529, Karshi	+	-	+	-	+
10.TE N30, Karshi	+	-	+	-	+
11.Fleet, Karshi	+	-	+	-	+
12.Taxi fleet, Karshi	+	-	+	-	+
13.Fleet, N24, Shakhrisabz	+	-	+	-	+
14.Work Shop N2532, Guzar	+	-	+	-	+
15.TE N101, Mubarek	+	-	+	-	+
16.TE N132, Yanginishan	+	-	+	-	+
17.Bus station, Karshi	+	-	+	-	+
18.Taxi fleet N8, Shakhrisabz	+	-	+	-	+
19.Usman-Yusupovsky TE N134, Yangimirishkor vlg.	+	-	+	-	+
20.Kasansky fleet	+	-	+	-	+
21 Training and industrial complex					

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Kashkadaryatrans', Karshi	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Work Shop N2528, Nukus	+	-	+	-	+
2. Transport Enterprise N10, Chimbay	+	-	+	-	+
3. TE N41, Shumanay	+	-	+	-	+
4. TE N42, Beruni	+	-	+	-	+
5. TE N44, Mangit	+	-	+	-	+
6. TE N63, Kungrad	+	-	+	+	-
7. TE N91, Karauzyak	+	-	+	-	+
8. TE N109, Takhiatash	+	-	+	-	+
9. TE N115, Turtkul	+	-	+	-	+
10.TE N116, Kegeili	+	-	+	-	+
11.TE N120, Nukus	+	-	+	-	+
12.Ellikalansky TE N20, Buston	+	-	+	-	+
13.TE N15, Muynak	+	-	+	-	+
14.Takhtakupyrsky TE N13, Takhiatash	+	-	+	-	+
15.TE N25, Kodzheyli	+	-	+	-	+
16.Fleet N19, Nukus					
17.Taxi fleet, Nukus					
18.Bus-Taxi fleet, Kodzheyli					
19.Bus station, Nukus					
20.Bozatausky small TE					
21.Kanlykulsky small TE					

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Samarkandtrans', Samarkand	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Zirabulaksky Transport Enterprise N31, Narpaysky region, Mirbazar vlg.	+	-	+	-	+
2. Dzhuminsky TE N100, Samarkand	+	-	+	+	+
3. TE N128, Samarkand	+	-	+	-	+
4. TE N129, Samarkand	+	-	+	-	+
5. Narimanovsky TE N130, Payaryksky region, Narimanovka vlg.	+	-	+	-	+
6. Work Shop N2507, Dzhambai	+	-	+	-	+
7. Work Shop N2509, Sanarkand	+	-	+	-	+
8. Work Shop N2514, Samarkand	+	-	+	-	+
9. Work Shop N2518, Kattakurgan	+	-	+	-	+
10.Work Shop N2522, Samarkand	+	-	+	-	+
11.Transport Enterprise N113, Koshrabad vlg.	+	-	+	-	+
12.Akdaryinsky TE N117, Laish vlg.	+	-	+	-	+
13.TE N14, Samarkand	+	-	+	-	+
14.Work Shop N2531, Samarkand	+	-	+	-	+
15.Fleet N22, Samarkand	+	-	+	-	+
16.Taxi fleet (complex), Samarkand	+	-	+	-	+
17.Bus stations unit, Samarkand	+	-	+	-	+
18.Bus-Taxi fleet, Kattakurgan					
19.Bus-Taxi fleet, Aktash					
20.Bus-Taxi fleet, Bulungur					

N: Name of Enterprise	Auxiliary buildings				
Industrial Enterprise 'Andizhantrans', Andizhan	**Storage**	**Car Port**	**Offices**	**Night accommodation for drivers**	**Open parking**
1. Transport complex, Andizhan	+	-	+	-	+
2. Transport Enterprise N84, Asaka	+	-	+	-	+
3. Work Shop N2508, Andizhan	+	-	+	-	+
4. Rented Work Shop, N2511, Andizhan	+	-	+	-	+
5. Taxi fleet, Andizhan	+	-	+	-	+
6. Bus-Taxi fleet, Asaka					
7. Transport Enterprise N36, Kurgantepa	+	-	+	-	-
8. TE N37, Shakhrikhan	+	-	+	-	+
9. TE N59, Pakhtaabad	+	-	+	-	+
10.TE N95, Khodzhiabad	+	-	+	-	+
11.TE N102, Chinabad	+	-	+	-	+
12.TE N6, Khanabad	+	-	+	-	+
13.TE N4, Markhamat	+	-	+	-	+
14.Bus station, Andizhan					
15.TE N148, Pakhtaabadsky region, Izbaskan vlg.	+	-	+	-	+
16.Komsomolabadsky TE N154	+	-	+	-	+
17.Bozsky TE N155	+	-	+	-	+
18.Dzhalalkuduksky TE N152	+	-	+	-	+
19.Bus fleet N27, Andizhan	+	-	+	-	+
20. Training and industrial complex, Andizhan	+	-	+	-	+

PRICE LIST FOR SPARE TYRES

DNEPROPETROVSKY PLANT

MODEL	USE	PRICE IN RUBLES	CNT's CAPACITY
6.15/13 I151	ZAZ, VAZ	132 508	1800
165/80 R13 D-67	Moskvich, VAZ	139 931	1800
6.45/13 M-145	Moskvich, VAZ	139 931	1800
165/80 R14	M-2141	148 797	1200
8.40/15 YA-245	UAZ	308 200	800
1200-500-508	Ural-5557 and modif.	1 762 530	100
1300-530-533	KrAZ-214, 253, 255A(BV)	2 036 375	100
18.00-25	BelAZ-540 and others	5 005 253	40
21.00-33 Vf-166A	BelAZ-548M, 548, 7523	8 809 195	30
240R508 U-2	GAZ-5 and others	588 610	450
260R508 I-N142B-1	ZIL, KAMAZ	636 850	350
280-508 D-48	LAZ, LIAZ	562 788	250
280R508 D-2M	LAZ, LIAZ	770 132	250
300R508I111A 1bis	IKARUS	880 253	250
11/70R22,5 D-1M	LIAZ	997 458	250
320R508ID-304 1 bis	MAZ, KrAZ	1 098 607	230
320R508 I-109 B-1	Trolleys	1 194 460	230
720R635	K-702	5 199 800	26(25,38)
720R665 FD-12	K-700, 701	4 236 573	26(25,38)
23,1-26 YA-242Ab	K-700	2 442 143	40
15,5R 38 F-2A	MTZ-50, 52, 80, 82	1 431 672	75(80)

BELOTSERKOVSKY PLANT

MODEL	USE	PRICE IN RULES	CNT's CAPACITY
205/70 R14 0I-297	GAZ 'VOLGA'	231 374	1200
205/70 R1 BTS-1	GAZ 'VOLGA'	220 583	1200
205/70 R14 BTSID-220	GAZ 'VOLGA'	210 353	1200
195/65 R15's' BTS-3	FOREIGN CARS	231 374	1200
185/65 R14 BTS-5	M-2141	187 402	1200
175-16/6,95-16 VLI-5	NIVA'	220 583	1300
175/70 R13 BL-85-1	VAZ	138 050	1800
165/70 R13 BL-85-1	VAZ 2108	132 055	1800
155/70 R13 BL-85-1	TAVRIYA'	132 055	1800
260R508 040 BM-1	ZIL, KAMAZ	638 850	400
280R508 ID-309,D-4	LAZ, LIAZ	770 132	320
300R508 I-111 AM	IKARUS	880 253	300
320R508ID-304 1 bis	MAZ, KrAZ	1 098 607	230 (245)
11,2-20 FBTS-35	MTZ-50, 52, 80, 82	442 904	400

MOSCOW PLANT

MODEL	USE	PRICE IN RUBLES	CNT's CAPACITY
175/70 R13 M-204	VAZ	139 645	1700

PRICE LIST FOR SPARE PARTS

N	DESCRIPTION	AVAILABLE			PRICE
		TOTAL	SHOP	JV	PER UNIT
1	GENERATOR 202	30	5	25	6708
2	CABIN BUFFER 2101-290500407	80	20	60	1935
3	AIR PRESSURE REGULATOR 11.3512010	10	10		1935
	GENERATOR BELT	70	70		301
4	WIND SCREEN FOR KAMAZ				3913
5	CARDAN SHAFT 5551-2201010				23220
6	CARDAN SHAFT 6303-2001010-01				21500
7	FENDER FOR MAZ - 64229				3354
8	CABIN FOR MAZ - 54329				447200
9	FENDER FOR MAZ - 54329				3954
10	BRAKE VALVE N: 100-3522110	20	10	10	2236
11	BRAKE VALVE N: 100-3514008	58	18	40	2881
12	PROTECTIVE VALVE N: 12.3515010 - 01				473
13	PROTECTIVE VALVE N: 100 - 351010 - 01	90	20	70	559
14	CONNECTING HEAD N: 200 - 35221010	50	10	40	387
15	VALVE N: 100-3522010	39	39		26230
16	RELIEF VALVE N: 11.35153700	80	20	60	1935
17	CABIN DEFLECTOR				387
18	CARDAN SHAFT 503-2201010-03				26230
19	CARDAN SHAFT 500 A - 2201010				21500
20	CARDAN SHAFT 503 A - 2201010 - 03				26230
21	T-JOINT FLEXIBLE PIPE	15	15		645
22	FOGLIGHT				1935
23	GENERATOR BELT				301
24	VENTILATOR BELT	70	70		301
25	WATER PUMP BELT	70	70		301
26	RIGHT SIDE				301
27	LEFT SIDE	19	19		301
28	ELECTRIC PNEUMATIC OUTPUT	4	4		6450
29	CLAMP				430
30	CONNECTOR				430
31	LEFT DOOR	3		3	5590
32	RIGHT DOOR	2		2	5590
33	BACK WHEEL CLAMP	100	30	70	215
34	FRONT WHEEL CLAMP	100	30	70	215
35	MIRROR				860
36	LIFTING CABIN FLEXIBLE PIPE (MIDLLE)	20	20		387
37	LIFTING CABIN LEXIBLE PIPE (SMALL)	15	15		301
38	STEERING BOOSTER FLEXIBLE PIPE				430
	TURN RELAY				473
39	MONITOR	10	10		301
40	GAS BUFFER	90	30	60	1376
41	ACELERATING VALVE	5	5		2236
	REAR LIGHT				430
42	JACK	50	10	40	3655

43	CABIN BOWL SHADE	27	27		817
	LAMPS				
	A 24 - 1	150	150		100
	A 24 - 5 - 1	50	50		100
44	A 21 - 3				100
45	GAS CABLE	20	20		1376
46	BREAK VALVE 100.3522110	17	17		3010
47	SEAT BUFFER	30	10	20	1677
48	CABIN SPRING	5		5	215
49	LIGHT FRAME	20	4	16	559
50	SIDE TURN REPEATER 26.3726	10	10		430
51	ELECTRIC LEFT WINDOW	8	8		860
52	ELECTRIC RIGHT WINDOW	8	8		860
53	RIGHT REAR LIGHT	10	10		1118
54	LEFT REAR LIGHT	10	10		1118
55	TAPAULIN 53366	26	26		58050
56	AIR FILTER 238	27	27		2494
	236	9	4	5	2494
57	AIR FILTER BODY	15	15		3120
58	SLEEPER	1	1		
59	PILLOWS				19780
60	CABIN TRIM	30	5	25	3225
61	TOOL CONTAINER				1849
62	LIGHT GRILL	20	10	10	151
63	STEERING COLUMN				
	a) TOP FRONT	10	2	8	151
	b) TOP REAR	20	5	15	181
	c) MIDDLE FOR LOCK	5	2	3	129
	d) BOTTOM REAR	10	5	5	181
64	STEERING COLUMN FOR 29				
	a) TOP	5	2	3	387
	b) BOTTOM	5	2	3	387
66	WIND SCREEN COVER FOR 32	5	5		258
	WIND SCREEN COVER FOR 29	10	10		258
	GASKET 238				516
	GASKET 236	8	8		473
67	GRILL				301
69	BOTTOM LEFT DOOR TRIM	20	10	10	233
	BOTTOM RIGHT DOOR TRIM	30	10	20	233
70	WINDOW THICKENER				
	METAL				301
	PLASTIC	40	5	35	301
71	STEERING WHEEL				3870
72	FILLER VENT COVER	30	30		146
73	DEGASSING TANK COVER	10	10		301
74	INTERIOR DOOR HANDLE	15	15		146
75	GEAR BOX REGULATOR	10	10		258
	WINDOW REGULATOR HANDLE	15	15		146

76	CENTRAL G - 80*	3	3		4300
77	ALCOHOLOMETER	80	80		1290
78	RIGHT DOOR LOCK	15	15		1075
	LEFT DOOR LOCK	15	15		1075
79	SEALING CABLE	26	26		1720
80	AIR FILTER OUTLET	40	10	30	430
81	HEATER	4	4		8600
82	PLASTIC COVER	10	10		344
83	RELIEF VALVE	40	10	30	1935
84	LIFTING CABING FLEXIBLE PIPE	25	25		430
	CONTROL LAMPS' UNIT - 513	8	8		645
	CONTROL LAMPS' UNIT - 513	8	8		645

* APPROXIMATELY C STANDS FOR CENTRAL, G STANDS FOR SOMETHING BEGINNING FROM G.

LIST FOR SPARE PARTS

MAZ TRUCK

N	DESCRIPTION	QTY	PRICE IN SUM
1	SEAT BUFFER	30	1677
2	CABIN BUFFER 2101-290500407	80	1935
3	BUMPER 5412-2801010	20	860
4	BUMPER 5432-2803010	6	860
5	FRONT BUMPER 5432-2803015	20	903
6	CONTROL LAMP UNIT 511	8	645
	513	8	645
7	SIDE TURN REPEATER 26.3726	10	430
8	LEFT SPRAYER 5336-8402261	2	903
9	RIGHT SPRAYER 5336-8403260	2	903
10	BACK SHAFT 6303-2502160	6	2408
11	BACK SHAFT 6303-2502170	5	7654
12	CARDAN SHAFT 503 A-2201010-03	16	26230
13	CARDAN SHAFT 5551-2201010	8	23220
14	CARDAN SHAFT 6303-2001010-01	18	21500
15	BENT SHAFT 236-1005009-D	6	30100
16	BENT SHAFT 238-1005008-G2	1	34400
17	CARDAN SHAFT 500A-2201010-05	18	21500
18	CARDAN SHAFT 503-2201010-15	19	26230
19	CARDAN SHAFT 5432-2201010-01	9	17845
20	CARDAN SHAFT 54329-2201006	2	21930
21	STABILIZER SHAFT 5336-2916015	3	1612,5
22	WATER PUMP 236-13007010-A2	2	6020
23	GAS BUFFER	90	1376
24	GENERATOR 202	30	6708
25	MUFFLER 5336-120010	5	1376
26	MUFFLER 64237-1201010	2	2236
27	UNIT HEAD 232-1003013-D	8	13330
28	UNIT HEAD 236-1003013-E	8	12040
29	CONNECTING HEAD N:200-35221010	50	387
30	CONTROL PICKUP	10	301
31	LEFT DOOR 64221-6100015	8	6192
32	RIGHT DOOR 64221 - 6100014	7	6192
33	DISK 5336 - 3101016	40	2881
34	DIFFERENTIAL 5336 - 2403012 - 01	15	19780
35	DIFFERENTIAL 5422 - 250302 - 01	5	18920
36	DIFFERENTIAL 5551 - 2403012	3	19780
37	DIFFERENTIAL 5551 - 2403012 - 01	7	19780
38	INTER AXLE DIFFERENTIAL 6422 - 2506010	2	29240
39	JACK	47	3655
40	SMOKE METER	10 SETS	7740
41	RIGHT DOOR LOCK	15	1075
	LEFT DOOR LOCK	15	1075
42	MIRRORS	50	860
43	CABIN 64221-5000012	5	607160
44	FLYWHEEL CRANKASE 238-1002311	2	2365
45	DOUBLE PROTECTIVE VALVE N:100-3515110	34	1505

46	VALVE N:100-3522010	39	26230
47	CUT-OUT VALVE 100-3515010 (12.3515110)	8	473
48	PROTECTIVE VALVE N:100-3515010-01	90	559
49	PRESSURE-RELIEF VALVE N:11.35153700	120	1935
50	CLAMP	200	430
51	PISTON RING 236-1004002-A2	92 SETS	860
52	CLUTCH 236K - 1601090-B	10	6450
53	AIR FILTER BODY 2384-11.09010-20	5	5160
54	AIR VALVE 100-3514008	3	2881
55	BRAKE VALVE 100.3522110	27	3010
56	BRAKE VALVE N: 100 - 3514008	42	2881
57	BRAKE VALVE N: 100 - 3522110	28	2236
58	FENDER 5336-8403017	4	2322
	536-8403016		
59	FENDER FOR MAZ - 54329	5	3954
60	FENDER FOR MAZ - 64229	20	3354
61	COVER 236-1701040 A	10	1591
62	COVER 5336-2405055-10	20	860
63	COVER AKB 5434-3748032	10	430
64	INLET COVER	30	146
65	PLASTIC COVER	10	344
66	DEGASSING TANK COVER	10	301
67	HOOK 85-2805005	13	3225
68	LAMPS A 24-1	150	100
	A 24-5-1	50	100
69	BLOCKING GEAR 6303-2509010	9	5160
70	CONTROL GEARS 5336 - 1702200 - 10	20	2236
71	INTERMEDIATE GEAR 1703325	20	2408
72	ELECTRICAL LEFT WINDOW	8	860
73	ELECTRICAL RIGHT WINDOW	8	860
74	LINK GEAR 5336 - 1702200 - 10	5	1978
110	STEERING COLUMN		
	a) TOP FRONT	10	151
	b) TOP REAR	20	181
	c) MIDDLE FOR LOCK	5	129
	d) BOTTOM REAR	10	181
111	STEERING WHEEL	1	3870
112	STEERING WHEEL 5320-3402015-01	5	2150
113	DOOR INTERIOR HANDLE	15	146
114	CHANGE GEAR REGULATOR	10	258
115	WINDOW REGULATOR HANDLE	15	146
116	WINDOW REGULATOR 21011-6104064	8	172
117	CHANGE GEAR HANDLE WITH DISK	5	860
	5336-1703410		
118	STABILIZER HANDLE 5336-2916022	20	774
119	HUB GASKET 5336-3104038	20	150,5
120	SLEEPER	1	19780
121	ALCOHOLOMETER 100-35-36010	280	1290
122	WIND SCREEN KAMAZ	68	3913
123	WIND SCREEN KamAZ	68	3913
124	ELECTRICAL LEFT WINDOW 5336-6104011	11	774
125	ELECTRICAL RIGHT WINDOW 5336-6104010	20	774
126	LEFT SIDE	19	301

127	RIGHT SIDE	19	301
128	STEPLADDER 5335-2902402	20	301
129	TAPAULIN 53366	26	58050
130	FUEL OIL PUMP 60.1111005-20	1	30100
131	SEALING CABLE	26	1720
132	CABLE WITH TIP 6422-1108596	10	301
133	BRAIDED CABLE 6422-13101148	11	602
134	GAS CABLE	20	1376
135	DUMP PIPE 6422-3101148	2	1548
136	INLET PIPE WITH COVER 6422-1018020-10	6	860
137	PIPE WITH FLEXIBLE PIPE 6422-3506146	30	193,5
138	PIPE WITH FLEXIBLE PIPE 6422-3506148	30	172
139	PIPE WITH FLEXIBLE PIPE 6422-3506183	30	180,6
140	PIPE WITH FLEXIBLE PIPE6422-3506188	30	421,4
141	FUEL PIPE 240-1104165	500	43
142	PIPE WITH FLEXIBLE PIPE 5336-3570230	40	154,8
143	TRACTION 6422-1703490	5	559
144	STEERING TRACTION 6422-3003052-10	5	3397
145	LONGITUDINAL STERRING TRACTION 5551-3003010-01	2	2838
146	LONGITUDINAL STERRING TRACTION 6422-3003010-01	2	2924

PRICE LIST FOR SPARE PARTS

MAZ-5551 AND TRACTORS

TEL. 91 68 94, FAX: 91 64 06
JV UZBEK MAZ SERVICE

N	DESCRIPTION	QTY	PRICE IN SUM
1	BUMPER 5432 - 2803010	6	860
2	CYLINDER UNIT FOR MTZ 240-1002001 B	36	27735
3	CYLINDER UNIT FOR MTZ 240-1002001 B	6	27735
4	LEFT SPRAYER 5336 - 8402261	2	903
5	RIGHT SPRAYER 5336 - 8403260	2	903
6	BENT SHAFT 236 - 1005009 -D	6	30100
7	BENT SHAFT 238 - 1005008 - G2	1	34400
8	CARDAN SHAFT 500A - 2201010 - 05	18	21500
9	CARDAN SHAFT 503 - 2201010 - 15	19	26230
10	CARDAN SHAFT 503A - 2201010 - 03	16	26230
11	CARDAN SHAFT 5432 - 2201010 - 01	9	17845
12	CARDAN SHAFT 54329 - 2201006	2	21930
13	CARDAN SHAFT 5551 - 2201010 - 01	8	23220
14	CARDAN SHAFT 6303 - 2201010 - 01	18	21500
15	POWER SHAFT 70 - 4202015	10	5805
16	POWER SHAFT 70 - 4202015	33	1935
17	WATER PUMP 236 - 13007010 - A2	2	6020
18	HYDRAULIC HOOK FOR MTZ 85-2807010	20	3225
19	MUFFLER 5336 - 1201010	5	1376
20	MUFFLER 64237 - 1201010	2	2236
21	HEAD UNIT 232 - 1003113 - D	8	13330
22	HEAD UNIT 236 - 1003013 - E	8	12040
23	HEAD UNIT 240 - 1003012 - A1	2	14620
24	LEFT DOOR 64221 - 6100015	5	6192
25	RIGHT DOOR 64221 - 6100014	5	6192
26	ENGINE D-245 N: 007473, N: 007970, N: 008065	3	180000
27	ENGINE YAMZ 238-2M N: 10478	1	350000
28	SMOKE METER	10 SETS	7740
29	CABINE FOR MAZ 64221	1	447200
30	FLYWHEEL CRANKASE 238 - 1002311	2	2365
31	CLUTCH CRANKASE 238 - 1601010	2	2150
32	DOUBLE PROTECTIVE VALVE 100-3515110	34	1505
33	CUT-OUT VALVE 100-3515010 (12.3515110)	8	473
34	PISTON RINGS 236-1004002 - A2	92 SETS	860
35	CLUTCH 236K - 1601090 - B	10	6450
36	AIR FILTER BODY 2384 - 11.09010 - 20	5	5160
37	BRAKE VALVE 100-3522110	10	2236
38	BRAKE VALVE 100-3522110-01	10	3010
39	FENDER 5336-8403017 536-8403016	4	2322
40	FENDER FOR MAZ 54329 54322-8511016	5	7740
41	FENDER FOR MAZ 64229 64227-8511010	20	7740
42	COVER 236-1701040 A	10	1591

43	COVER AKB 5434-3748032	10	430
44	HOOK 85-2805005	13	3225
45	AIR VALVE FOR MAZ 100-3514008	3	2881
46	OIL PIPE 70-3407100	22	215
47	LINK GEAR 5336-1702200-10	5	1978
48	CLUTCH STRENTHENING GEAR 5336-1602738-10	4	1591
49	STEERING TRACTION HEAD 6422-3003057	20	1462
50	BOTTOM FLANGE OF FILTER AIR OUTLET 64221-8401127	20	215
51	DEFLECTOR FOR MAZ 64221-8401127	20	258
52	SUPPORT 72-2209010	5	8170
53	SNALL CORRUGATED OUTLET 6422-1109144-01	10	430
54	RUNNING BOARD 6422-8405016	6	430
55	RUNNING BOARD 80-8405010 A2	2	1505
56	CROSSHEAD 80-4605046	12	1505
57	FRONT WHEEL CLAMP 5336-3101050	150	215
58	INTERMEDIATE GEAR 5551-1703351	5	2150
59	FRAME BRACE 70-4605150	76	1505
60	CAM SHAFT 236-1006015 G2	8	2752
61	CAM SHAFT 238-1006015 - G2	8	3440
62	SOCKET 400	20	344
63	STEERING WHEEL 5320-340201-01	5	2150
64	WINDOW REGULATOR HANDLE 2101-6104064	8	172
65	CHANGE GEAR HANDLE WITH DISK 5336-1703410	5	860
66	HUB GASKET 5336-3104038	20	150,5
67	ALCOHOMETER 100-35-36010	280	1290
68	WIND SCREEN KamAZ	68	3913
69	STEPLADDER 5335-2902409	20	301
70	FUEL PUMP 60.1111005-20	1	30100
71	CABLE WITH TIP 6422-1108596	10	301
72	BRAIDED CABLE 6422-13101148	11	602
73	DUMP PIPE 64227-1203075	2	1548
74	FEED PIPE WITH COVER 6422-1018020-10	6	860
75	FUEL PIPE 240-1104165	500	43
76	TRACTION 6422-1703490	5	559
77	STEERING TRACTION 6422-3003052-10	5	3397
78	LONGITUDINAL STEERING TRACTION 6422-3003010-01	2	2838
79	LONGITUDINAL STEERING TRACTION 6422-3003010-01	2	2938
80	FOGLIGHT FG - 152A	400	1935
81	FOGLIGHT FG - 152A	270	1935
82	SPRAYER 261112010	6	1935
83	SHAFT 5551-1703448-10	5	774
84	CENTER SHAFT 70-3001065, 70-3001065-01	50	3612
85	STEERING BOOSTER CYLINDER	3	4300
86	STEERING BOOSTER CYLINDER 5336-3405005-01	2	8600
87	CONNECTING ROD 1004045	36	2580
88	PINION 236-1006214 G2	15	1290
89	PINION 236-1029116 A	15	1290

90	PINION 236-1029122	15	1290
91	PINION 236-102946 D	15	1376
92	CRANKSHAFT PULLEY 40-1005131	50	645
93	PUMPING FLEXIBLE PIPE 6422-3917310	3	1376
94	LIFTING CABIN FLEXIBLE PIPE 5536-5009160	15	344
95	T-JOINT FLEXIBLE PIPE	15	645
96	BRAKE FLEXIBLE PIPE 500-350606062	40	301
97	BRAKE FLEXIBLE PIPE 500-3506210	20	387
98	BRAKE FLEXIBLE PIPE 504B-3506210	30	387
99	BRAKE FLEXIBLE PIPE 6422-3506085-01	8	430
100	UNREGULABLE BAR 6303-291904	10	2580
101	TOOL BOX 500A-8507010	2	1720

ANNEX E.2

KAZAKHSTAN

1. Dealers of Transport Vehicles

In Kazakstan, the dealers of KamAZ Works are: the joint-stock companies KAMAZ Avtocentre, located in all oblast centres of the Republic; and the representative of GAZ Works is the joint-stock company Kazakstangasavtoservice, which has its branches in each oblast. KAMAZ Avtocentres and the branches of Kazakstangasavtoservice J/S both work independently.

The representative of ZIL Works in Kazakstan is the Centre of Technical Servicing of ZIL Vehicles headquartered in Almaty.

The brief information on dealer businesses in Kazakstan is presented in Table 1.
In addition, the above vehicle manufacturers KAMAZ, ZIL and GAZ directly deliver their vehicles and spare parts for some enterprises and individuals when ordered.

2. Distribution Of Spare Parts

The centres of production of spare parts for GAZ, ZIL and KAMAZ are manufacturers of the corresponding vehicles. In addition to the major manufacturers of spare parts (i.e., GAZ, ZIL and KAMAZ) in Kazakstan the spare parts are manufactured by repair plants and road centralised technical servicing businesses (RCTSBs) (see Table 2).

Distribution of spare parts from the major manufacturers (works) is carried out by dealer businesses (see Table 1). Deliveries of the spare parts manufactured by these works may be performed in any quantities and in any assortment for any vehicle units and parts.

Sales of the spare parts manufactured at repair plants and RCTSBs to local transport operators are carried out by order or through vehicle shops. For example, parts for KAMAZ truck manufactured by Asker J/S, Almaty, are sold by Smat Corpration shop (Tel. 43-43-36).

Besides, Smat Corporation is one of few recently formed private firms in Kazakstan, which is engaged in sales of spare parts for transport vehicles.

Another channel of distribution of spare parts for trucks is the network of businesses for technical and material supply, included in oblast transport associations. At present, most of them are privatised. The list of those businesses is given in Table 4.

3. Technical Servicing Stations

At the KAMAZ Avtocentre and Kazakstangasavtoservice dealer business, maintenance of KAMAZ and GAZ trucks, as well as their warranty repairs and on-going repairs of units and parts are made (see Table 1).

Maintenance and replacement of units and parts, as well as all on-going repairs of KAMAZ trucks are carried out at RCTSB's operating centres (Table 2).

In maintaining of constant operability of KAMAZ, ZIL and GAZ trucks, the important position is occupied by the Republic's repair plants, information on those is presented in Table 3.

Transport businesses which have GAZ, ZIL and KAMAZ trucks, carry out their maintenance and on-going repairs, as well as manufacture of rubber parts at their own production facilities.

Such enterprises have specialized facilities for maintenance and repair of vehicles, as well as zones for on-going repairs of units.

The options for maintenance and on-going repairs of vehicles, as well as repairs of units by private owners of vehicles are available.

There are no data on officially registered service stations for ZIL, GAZ and KAMAZ trucks in the Republic.

4. On-Road Service Stations

At present, we have no information on on-road stations for technical maintenance and on-going repair of ZIL, GAZ and KAMAZ trucks in the Republic. It is thought that they will not be profitable. But in future, it is planned to create on-road service station based on the Kazakstangasservice dealers centers. These staions will be organized on main highways and near motels.

Table 1

Information on Dealers Enterprises in Kazakstan (ZIL, GAZ and KAMAZ Trucks)

Address of the center Telephone number	Dealers services		Conditions of deliveries of vehicles and spare parts			Technical services		Type of ownership of Service stations
	Vehicles	Spare parts	Payment	Terms of delivery	Warranty run	Warranty repair	Maintenance and on-going repair	
1	2	3	4	5	6	7	8	9
Almaty, KAMAZ Avtocentre 350835 (W)	All KAMAZ models	Any number and any parts for all units	100% of advance payment	7-15 days upon payment	Within 1 year, not more than 40,000 km of run	yes	yes	Collective
Akmola KAMAZ Avtocentre Tel. 240740	Same as previous	Same as previous	Same as previous	1-15 days upon payment	Same as previous	Same as previous	Same as previous	Same as previous
Aktau KAMAZ Avtocentre Tel. 74236	Same as previous	Same as previous	Same as previous	12-15 days upon payment	Same as previous	Same as previous	Same as previous	Same as previous
Aktyubinsk KAMAZ Avtocentre Tel. 42621	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous

1	2	3	4	5	6	7	8	9
Atyrau, KAMAZ Avtocentre Tel. 33057	All KAMAZ models	Any number and any parts for all units	100% of advance payment	10-15 days upon payment	Within 1 year, not more than 40,000 km of run	yes	yes	Collective
Zhambyl KAMAZ Avtocentre Tel. 52161	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Zhezkazgan KAMAZ Avtocentre Tel. 44468	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Karaganda KAMAZ Avtocentre Tel. 254181	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Kzyl-Orda KAMAZ Avtocentre Tel. 78191	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Kokshetau KAMAZ Avtocentre Tel. 65278	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous

Table 1 (continued)

1	2	3	4	5	6	7	8	9
Kotanai, KAMAZ Avtocentre Tel. 232493	All KAMAZ models	Any number and any parts for all units	100% of advance payment	10-15 days upon payment	Within 1 year, not more than 40,000 km of run	yes	yes	Collective
Pavlodar KAMAZ Avtocentre Tel. 737119	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Petropavlovsk KAMAZ Avtocentre Tel. 344595	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Semipalatinsk KAMAZ Avtocentre Tel. 632215	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Taldykorgan KAMAZ Avtocentre Tel. ~~25939~~ 52939	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Turgai KAMAZ Avtocentre Tel. 30606	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous

Table 1 (continued)

1	2	3	4	5	6	7	8	9
Uralsk KAMAZ Avtocentre Tel. 31953	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Ust-Kamenogorsk KAMAZ Avtocentre Tel. 30100	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Shymkent KAMAZ Avtocentre Tel. 667161	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
88 Rozovaya street, Almaty, Centre for technical maintenance of ZIL vehicles Tel. 395981	All ZIL models	Same as previous	Same as previous	Within 1 month	Same as previous	no	no	Same as previous
Almaty Kazakstangazsevice, J/S Tel. 6-1588	All GAZ models	Any quantity for all units	30% advance payment, the remaining - after completion	14-15 days upon payment	Within 1 year, not more than 20-30 thousand of run	yes	yes	Mixed (collective and private)

Table 1 (continued)

1	2	3	4	5	6	7	8	9
Akmola Akmolagazsevice, J/S Tel. 320329	All GAZ models	Any quantity for all units	30% advance payment, the remaining - after completion	14-15 days upon payment	Within 1 year, not more than 20-30 thousand of run	yes	yes	Mixed (collective and private)
Aktau Aktaugazavtoservice,J/S Tel. 338569	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Aktyubinsk Aktyubinskgazavtoservice, J/S Tel. 223558	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Spare parts are available, but no servicing at present		Same as previous
Atyrau Atyraugazavtoservice, J/S No telephone	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Pavlodar Pavlodargazavtoservice, J/S Tel. 740905	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous

Table 1 (continued)

1	2	3	4	5	6	7	8	9
Semipalatinsk Semipalatinskgazsevice, J/S Tel. 631626	All GAZ models	Any quantity for all units	30% advance payment, the remaining - after completion	14-15 days upon payment	Within 1 year, not more than 20-30 thousand of run	no information	no information	Mixed (collective and private)
Ushtobe Karatalgazavtoservice,J/S Tel. 25575	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	yes	yes	Same as previous
Arkalyk Arkalykgazavtoservice,J/S Tel. 24061	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	no information	no information	Same as previous
Uralsk Uralskgazavtoservice,J/S Tel. 44501	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Ust-Kamenogorsk Vostokgazavtoservice,J/S Tel. 475524	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous

Table 1 (continued)

1	2	3	4	5	6	7	8	9
Makhtaral settlement Makhtaralgazsevice, J/S Tel. 32727	All GAZ models	Any quantity for all units	30% advance payment, the remaining - after completion	14-15 days upon payment	Within 1 year, not more than 20-30 thousand of run	no information	no information	Mixed (collective)
Zhambyl Zhambylgazavtoservice, ATKC Tel. 43690	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	yes	yes	Same as previous
Zhezkazgan Zhezkazgangazavtoservice,J/S Tel. 768736	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	no	no	no
Karaganda Karagandagazavtoservice,J/S Tel. 541061	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	No information	No information	Same as previous
Kzyl-Orda Kzylordagazavtoservice,J/S Tel. 33939	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Schuchinsk Agroservice,J/S Tel. 44473	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous
Kostanai Kostanaigazavtoservice,J/S Tel. 278944	Same as previous	Same as previous	Same as previous	Same as previous	Same as previous	no	no	Same as previous

Table 2

Production Characteristics of KAMAZ Technical Service Center

Address of the Center, telephone number	Number of posts		Technical services		Spare parts	
	Maintenance	**Repair**	**Maintenance**	**Repair**	**Manufacture**	**Restoration**
41th Razyezd, Aktobe Tel. ~~22968~~ 22962	6	1	TO-2	Replacement and on-going repair of units and parts	yes	yes
Zapadnaya Promzona, Arkalyk Tel. 23274	7	4	TO-2	Same as previous	Same as previous	Same as previous
2, Avtomobilnaya street, Zhambyl Tel. 50833	7	2	TO-2	Same as previous	Same as previous	Same as previous
100 Molokova street, Karaganda Tel. 514017	20	2	TO-2	Same as previous	Same as previous	Same as previous
62 Krupskaya street, Kzyl-Orda Tel. 51711	5	5	TO-2	Same as previous	Same as previous	Same as previous

Table2 (continued)

183 Valikhanova street, Kokshetau Tel. 70381 7232-1	10	1	TO-2	Replacement and on-going repair of units and parts	yes	yes
Umirzak settlement, Aktau (Shevchenko) Tel. 93447	5	Together with TO	TO-2	Same as previous	Same as previous	Same as previous
13 Transportnaya street, Pavlodar Tel. 740815	28	10	TO-2	Same as previous	Same as previous	Same as previous
7 Gacek street, Petropavlovsk Tel. 73871	9	Together with TO	TO-2	Same as previous	Same as previous	Same as previous
20 Promyshlennaya street, Taldykorgan Tel. 56740	2	Together with TO	TO-2	Same as previous	Same as previous	Same as previous
20 Zheleznodorozhnaya street, Uralsk Tel. 23534	8	2	TO-2	Same as previous	Same as previous	Same as previous
1st km Tashkentski Trakt, Shymkent Tel. 92855	14	5	TO-2	Same as previous	Same as previous	Same as previous

Table 3

Types of Services Provided By Repair Plants for GAZ, ZIL and KAMAZ Trucks

Name of repair plants, address, telephone number	Capital repair of tucks			Repair of units and chassis			Repair of engines			Manufacture of spare parts
	GAZ	ZIL	KAMAZ	GAZ	ZIL	KAMAZ	GAZ	ZIL	KAMAZ	
1. Almaty Vehicle Assembly Plant J/V 3rd km Iliiskoye Shosse, Tel. 520515	yes	-	-	yes	-	-	yes	-	-	yes
2. KP Pavlodarski ARZ 24 Transportnaya street, Pavlodar Tel. 740417	-	-	-	yes	-	yes	yes	yes	-	-
3. KP Semipalatinskoye ARO 31 Ryskulbekova, Semipalatinsk Tel. 442694	yes	-	-	yes	-	-	yes	-	-	yes
4. Shymkentski ASZ J/V 62 Orazbaeva street, Shymkent Tel. 660475	-	-	-	-	-	-	-	yes	-	yes
5. Avtoremontnik J/S 5 Okhotskaya street, Karaganda Tel. 561255	-	-	-	-	-	-	yes	yes	-	yes

Table 3 (continued)

6. AT-Zoly J/S, 1 Logovaya street, Atbasar, Akmola oblast Tel. 43221	-	-	-	-	yes	yes	-	-	-	-
7. Zhalyk J/S 12 Abylai Khana Ave., Aktobe Tel. 50863	-	-	-	-	-	-	yes	yes	-	yes
8. Isker J/S 3 Auezova street, Almaty Tel. 459790	-	-	-	-	-	-	-	yes	yes	yes
9. Remshina J/S 3RD km Iliiskoye Shosse, Almaty Tel. 520515	-	-	-	-	-	-	-	-	-	yes
10. Saimak J/S 1 Promyshlennaya street, Taldykorgan Tel. 84662	-	-	-	-	yes	yes	-	yes	-	-
11. Compressor J/S 1 Polevaya street, Uralsk Tel. 31521	-	-	-	-	yes	yes	-	yes	-	-

ANNEX F

A REPORT INTO COMMERCIAL SERVICES

Commercial Services in Central Asia

Introduction

As part of the study into automotive support services, the project terms of reference (3.2.3 p9) require an examination of 'Commercial Services' defined as:

"Freight Brokering Services (FBS), Commercial Transport Centres (CTC) and Vehicle Off Road (VOR)".

This report discusses each of these in turn.

Freight Brokering Services

We have reviewed the FBS which was established by USAID in the last quarter of 1994. We have obtained copies of original reports and manuals and have discussed the schemes with involved parties.

The FBS was established as a support service for recently privatised truck operations. Two pilots were established in Chimkent and Kustanai oblasts.

At the time, the pilots were deemed a success although the length of pilot (2 ½ months) was probably insufficient to demonstrate stability given the nature of such brokering services. It should also be noted that the driving force behind the project was to serve agricultural business - a highly seasonal industry - which would not aid ongoing stability.

The documents recommended a roll-out of the FBS across Kazakhstan during 1995 but USAID funding was withdrawn from the project and the teams moved to other projects. In a short time period following USAID withdrawal, both schemes collapsed.

We consider there to be a number of reasons for this:

- the pilot did not demonstrate that the FBS had reached an ongoing position of stability
- the establishment of an FBS in agricultural areas is unlikely to generate the year round bedrock of business that an FBS needs to generate and maintain credibility with shippers and transport operators
- an FBS is a product of, rather than a route to a developed market
- even in developed Western markets, Freight Brokering Systems normally fail. There are a number of reasons for this:

    - it is difficult to establish a regular supply of loads for the brokering system to handle.
    - haulage is, at its roots a highly entrepreneurial business and deals are essentially done on individual loads with very low margins.
    - this means that as soon as the brokering service establishes a relationship between a shipper and a transport operator, the two parties combine to circumvent the system.

A number of FBS schemes have been attempted in European markets. These schemes have been open to all companies, closed (limited to member companies of associations or interest groups) or hybrids of the two.

One such hybrid system was established in the UK during the 1980's by the British National Freight Company.

By far the largest European transport operator at the time with 25,000 vehicles, the company established Datafreight a computerised brokering system which was offered on the open market to all operators.

Such a system should have had a higher than normal chance of success because the 'in-house' loads gave the system its commercial bedrock. However, the FBS still never reached a sustainable situation and Datafreight was abandoned within 2 years.

Regarding the Traceca project, we have carried out our review and believe that the introduction of an FBS is not tenable at this stage.

We believe that an FBS needs to have something more substantive than pure 'load availability' behind it to be sustainable. The operator quality pilot will eventually produce quality accredited operators in each republic who conform to transport regulations and work to high operational service standards.

These operators will prove to be a group differentiated from other operators in the republic and will provide a good basis for a brokering service as shippers will prefer to make loads available to those operators. However, this will only occur when the market needs it.

Commercial Transport Centres

Another major aspect of the USAID Kazakhstan Trucking Privatisation Project was the establishment, during 1994 and 1995 of a number of commercial transport centres (CTCs). Once again we have reviewed original reports concerning the establishment of these and have reviewed their current situation.

The original project took place within the context of a directive that 20% of state-owned vehicles (including military etc) be privatised. The procedure followed was the creation of open auctions around the Republic where interested groups bid for the rights to sell groups of state vehicles.

A total of 90 CTC's were established throughout the project, employing more than 400 people. It appears that however that whilst 2175 trucks were sold through 'Regional teams and Terkoms' , only 203 trucks were sold through CTC's.

We understand that, following the end of the USAID presence and the round of initial auctions, all of the CTC's, have ceased to function as truck dealerships although two still exist in a freight forwarding capacity within the fledgling NIIAT system.

The failure of the CTC's to become established is a lesson that needs to be learnt for this project as well. The CTC's were given a good, and in many ways artificial start with the influx of auctioned vehicles and the auction process gave them a great advantage within their local market.

The fact that even a start like that could not be sustained tells us a lot about the state of the market. Clearly, a free and working truck market is another product of an established market, not a short-cut to achieving one. The fact that CTC's had a one off supply of used trucks was clearly not sufficient to establish a fully functioning second-hand market.

Any used vehicle market needs a constantly working new vehicle market to supply it with vehicles at its top end. Clearly, there has been insufficient growth of this type for the market to take off through the CTC's.

This is not to say that the market does not exist. Clearly, there is a used car and truck market - at least in Almaty. However, as is often the case as the Republic emerges from the command economy, artificial structures cannot be superimposed on these embryonic markets.

Having completed the review of CTC's in this phase of the project, we believe that the situation should be observed until there appears to be a need for CTC's from the market. In the meantime the support services pilot on this project will help to inject new and used trucks into the top end of the market and will yield results but the market will still take time to develop.

Vehicle off Road (VOR)

There have been no apparent previous studies into VOR within the Area. The data being collected by our project into spare parts distribution is, as far as we know the first data to be collected on this subject.

In European market economies, one of the most sophisticated supply chains in operation is VOR. This chain allows the guaranteed timely delivery of essential spare parts on a short order lead time.

VOR as a separately defined service has only occurred because of the need to supply an ever-increasing range of spare parts from a reducing number of stock-holding points whilst still keeping vehicle off-road (and hence unproductive) time to a minimum.

Once again, VOR as a service is a product of the increased sophistication of the Western markets and should not be considered at this stage.

Most certainly VOR already exists within each Republic. Spare parts for the three main suppliers - Zil, Gaz and Kamaz are relatively easy to purchase at a large number of centres. Owners of these trucks are experts at modifying existing equipment to keep VOR to a minimum and roadside repairs are commonplace.

We do not believe that the pressures to reduce stockholding will be apparent in the area for some years yet. When we have completed the analysis of the location of spares suppliers we will be able to examine the density of coverage for each major manufacturer. This will enable us to review the potential for VOR at a future date.

Summary

In summary , each of the three services identified in the Terms of Reference (3.2.3) are present in some form in Western market economies, although we believe that Freight Brokering has historically had little success even in those economies.

However, each of the services is a product of advanced markets and has grown accordingly. The USAID experience has shown that artificially imposing them on a growing market which is not yet ready for them is not sustainable.

We believe that our Business Pilots will lay a foundation that will help Freight Brokering (through the Operator Quality Pilot) and CTC's / VOR (through the support services pilot) to become established . However this will only happen if the market demands it. Furthermore, we believe that when it does happen, it will initially be in the capital of each Republic where demand is greatest - not out in the regions.

ANNEX G

A PROFILE OF KITCO - THE KYKGYSE - INDIAN TRANSPORT COMPANY

KIT COMPANY

2

PROCTER & GAMBLE DISTRIBUTORS
IVECO CARS DISTRIBUTORS

TEL. (3312) 211856, 215965
Fax. (3312) 2118.56
Moscovskai st. 172
Bishkek. 720010
Kyrgyzstan Republic

Кыргызская Республика
Бишкек, 720010
Московская , 172
тел. (3312) 211856,215965
факс (3312) 211835,215965

C O M P A N Y P R O F I L E

KIT Company: Kyrgyz-Indian Trading Company.
Partners: 1."Kyrgyz Jer" Corporation 51%
2. Kulvinder Bath 49%

Summary of "Kyrgyz Jer" Corporation.
"Kyrgyz Jer" Corporation which is 51% partner is five years old company. It is the owner of two huge buildings where their all offices, bank, Stock Exchange, restaurant are located.These buildings are worth of $ 5 million.
Corporation has many different joint ventures which include a private College, a restaurant, T.V. Compant e.t.c.
"Kyrgyz Jer" Corporation is also a founder of "Kyrgyz Jer" Bank, which is one of the most advanced banks in Kyrgyzstan.

KIT Company foundation date - June 1995.
First six months turnover - $ 500,000
Total staff - 20 people
Activity - specialist in marketing and trading.
Product:
Company was founded to market "Procter&Gamble" product in Kyrgyzstan. KIT Company is exclusive Distributor for "Procter&Gamble" in Kyrgyzstan. This year KIT Company has signed dealership agreement with IVECO, Italy and Philips Electronics.

Marketing System:
About 10 specialists are working for marketing with 4 vans, 2 hours deliyery service to stores, kiosks. We have Cash&Carry in the Central Supermarket and in Osh Bazzar,which is the biggest wholesale bazzar in Bishkek. One Cash&Carry in Tokmok town 60 km away from Bishkek. Shortly KIT Company is going to open its Cash&Carry all over the country.
For 1996 expected turnover only for P&G product is $ 5 million.
KIT Company is open for any new joint venture: production plant, bottling plant, supermarket, restaurant e.t.c.

ANNEX H

A PROFILE OF THE BAYAN - AUL COMPANY OF KAZAKHSTAN

Profile of Bayan Aul

Joint Stock company International Trade House Bayan-Aul started its business in 1992. At the beginning Bayan-Aul was mainly of commercial nature due to lack of its own capital. However, the Trade House started to consolidate its own business experience by contacting its reliable partners to increase its sphere of activity both inside and outside of Kazakhstan. Working with its own floating assets the company has determined for itself the following spheres of business activity in delivery of goods and cargo:

- China
- UAE
- Turkey

Cargo moved has involved imports domestic products and raw materials and imports of necessary equipment and materials for local plants and factories. At this moment Trade House has made a strong showing on the Kazakhstan market. This company does not have debts in local and foreign banks.. In 1995 a tender to sell goods, mortgaged by companies using the National Bank of Kazakhstan, was won.

In 1993 the automobile complex Bayan-Aulautoservice was established, during this year turnover of Trade House came to 54 352 000 tenge and since 1994 revenue has totalled 2419000 tenge. Automobile complex `Bayan-Aulautoservice' now directs its energies to:

- increasing efficiency and lowering operating costs
- improving the transport vehicles by purchasing new western trucks corresponding to the international technical and ecological demands for cargo transportation from Kazakhstan to the European countries

Currently Bayan-Aulautoservice has secured contracts with the following companies

- TC (Transport Company) `Er-Keruen'
- PMTO APAOGAT
- JSC `Almaty Tobacco Company'
- JV `National Distribution Company'for Phillip Morris

Goods moved for these companies include footwear, confectionery, tobacco alcoholics and cosmetics.

Bayan-Aulautoservice has now changed its name to B.A. Logistics and is currently formulating a business plan with Tacis project 'Improvement of Road Services - Central Asia

ANNEX I

A SUMMARY OF THE TRANSPORT REGULATIONS SECTION OF THE ALMATY SEMINAR

SUMMARY OF PROCEEDINGS AT ALMATY SEMINAR 10-14 JUNE 1996

SESSION 1: INTERNATIONAL INSTITUTIONS AND NATURE OF THE ROAD TRANSPORT MARKET IN THE EUROPEAN UNION

This was an introductory session designed to paint a backcloth against which all other transport issues would be relevant. There were no contentious issues as this was simply an information giving session but, nonetheless, was of interest to delegates in a broad context.

SESSION 2: VEHICLE WEIGHTS AND DIMENSIONS

The session concentrated on the types of vehicles, trailers and combinations; the maximum gross weights with various axle configurations; vehicle widths, lengths and height in accordance with EU standards.

The delegates had a broad knowledge of the types of standards that applied but had no knowledge of the detail. Generally, the delegates were amazed at the complexity of the issue and many discussions/questions were raised. The position in the Republics as explained by the delegates is as follows:-

Kazakstan

The maximum axle weight for international routes is 10 tonnes.

Uzbekistan

The maximum axle weights for main routes is 8 tonnes.

In all other Republics, there were no limits and in those where axle weights were nominally maximised, there was no rigorous enforcement.

All generally acknowledged the EU standards and assumed that because, on international journeys, they used European trucks, they would comply.

There were no regulations on height, width or lengths except that restrictions were imposed on some bridges.

SESSION 3: CONSTRUCTION AND USE OF GOODS VEHICLES

This session concentrated on the EU standards for specific constructional items on vehicles such as brakes, tyres, lighting, speed limiters, emissions etc.....

The position in all Republics is that they follow the former USSR guide booklet on these subjects. The booklet is to be translated so at the time of writing it is impossible to comment further. However, no vehicles have speed limiters fitted.

cont'd.....

SESSION 4: PLATING AND TESTING OF VEHICLES

This session focused on the plating and testing requirements for vehicles over 3.5 tonnes, the types of test, roadside checks and a video showing the annual testing procedure adopted in the UK. The video proved extremely useful in putting across the mechanics of the test and the organisation of the regime applicable to this aspect of operators' responsibilities for maintaining the vehicle in a safe and roadworthy condition.

There is a regime for vehicle testing in all Republics. It is undertaken by the road police inspectorate and undertaken on operators' premises. Each operator is given a six month time window to complete the testing procedure and once inspected, vehicles are given a certificate which is shown in the vehicle. Certification is for one year and is apparently rigidly enforced.

However, there must be question marks about the ability to test to sufficiently high standards because most operators would lack the sophisticated equipment required to meet EU standards e.g. very few had weighbridges.

Also, there was no timescale applicable for rectification work to be carried out and roadside checks were allegedly rare and random.

The inspection regime applies to all goods vehicles and trailers regardless of weight.

SESSION 5: ENFORCEMENT

The types of enforcement measures applicable in the EU were discussed. Fixed penalties, licence endorsements, disqualification offences and the types of offences giving rise to potential enforcement measures were discussed.

In all Republics, a fixed penalty system was operated by the traffic police. Again, the FSU system is operated and a book is being translated which will give the detail. It was apparent and, indeed stated, that the traffic police could always be persuaded to shelve prosecutions if encouraged to do so. Therefore, there is little consistency in enforcement measures.

Drinking and driving is normally an automatic disqualification and this, together with other serious violations of traffic law, are judged by a Driver Qualification Board, evident in all Republics.

SESSION 6: DRIVER LICENSING

The new 1996 harmonised EU system of driver licensing was explained, together with the new testing procedures and medical requirements for drivers of goods vehicles.

All Republics operate the FSU system, with classifications being broadly similar to the EU, except that the sub-divisions of licence categories have not been developed.

There are a few other relatively minor differences as follows:-

cont'd.....

- ★ There is no time limit on the duration of licences.
- ★ Three years experience is required at Class C 3.5 tonnes plus rigid before a Class E test may be taken (C+E = articulated).
- ★ Medical checks on drivers over age 45 but they are non-specific.
- ★ Uzbekistan has an age limit of 55 for drivers on international journeys.

SESSION 7: DRIVERS' HOURS AND TACHOGRAPHS

A detailed explanation of EU drivers' hours rules and the operators'/drivers' responsibilities in relation to tachographs were explained. Exercises on the operation of drivers' hours were also undertaken by the group.

There is a working time limit for all employees in the Republics of 42 hours per week. For Uzbekistan this is 40 hours per week. Other than these general rules, there are no specific rules for drivers and hence no controls and no use of tachograph for any driver other than those travelling to the EU.

Again, there was a general appreciation that rules existed, but it was very evident that the group were unable, and had no experience in, interpreting the detail. Whilst being acutely interested in the subject, it is clear that further training is necessary, which must include the interpretation and analysis of charts.

SESSION 8: DANGEROUS GOODS - ADR AGREEMENT

The purpose of the Agreement, the contracting parties, classes of dangerous goods, vehicle markings and driver responsibilities were explained.

At present, no Republics are contracting parties, although Kazakstan intend to seek to be so shortly. Assistance with a detailed training package will be required.

SESSION 9: CONDITIONS OF CARRIAGE AND INSURANCE - INTERNATIONAL

A brief resumé of CMR, the contracting countries, carrier liabilities, compensation, the CMR consignment note and insurance implications for international road journeys was presented.

Also, copies of the FTA modal conditions of carriage was left with the delegates as an example of how business is conducted in the EU.

Only Kazakstan and Uzbekistan are currently contracting countries. The others apparently intend to be. Certainly, no countries offer conditions of carriage as part of the business contract with hauliers and the whole subject of insurance is both difficult to organise and a thorny issue in Central Asia.

cont'd.....

SESSION 10: THE TIR CONVENTION

The role of IRU, Guaranteeing Associations, the function of the carnet and the role and functions of the customs authorities for discharging the carnet and duties payable, were presented. Particular focus was put on the responsibilities and risks of the guaranteeing associations.

At present, only Kazakstan and Uzbekistan are party to the Convention. All other Republics have applied and are seeking approval.

Generally, there is an appreciation of the procedural elements of the system, although the impact of non-discharge and fraudulent practices seems to be less clear to the participants.

SESSION 11: OPERATOR LICENSING

This session concentrated on the types of operator licences for own account, hire and reward and international operations. The EU standards for the criteria for obtaining a licence covering general fitness, vehicle maintenance operating centres, financial resources and access to the profession through CPC were explained in detail.

Each Republic has a slightly different arrangement for operator licensing as explained below:-

- Kyrgistan

  The vehicle inspection service issue operator licences with difference colours for local, national, international and forwarding agents. They can be issued for periods of three months, six months or one year.

  Fees are determined by the vehicle capacity.

- Kazakstan

  A similar regime applies except that for international licences, the operator must have at least five years experience or show evidence of a formal qualification in transport e.g. a university degree.

- Turkmenistan

  Licensing is for up to three years on only international operations. They are planning a CPC course and they have attended the ASMAP course which FTA assisted in the development of this training.

- Uzbekistan

  Operator licensing is controlled by a special agency - UZAVTOTRANS and criteria similar to the EU requirements are being introduced. Again, they have made contact with ASMAP in Moscow regarding CPC training.

cont'd.....

- Tadjikistan

  There are no reported systems operating in this Republic. The Transport Ministry is considering the matter and the inspection service has just been formed.

  It should be noted that all transport companies are registered and details of all commercial vehicles are recorded regardless of weight. This information is available at the GOSCOMSTAT.

Arising out of this session, which included a detailed explanation of the EU requirements for CPC - Access to the Profession, there was clearly a thirst for knowledge and practical help from the West. The linkages with other parts of the seminar became clearly apparent to them.

The other issue which featured on a number of occasions was the issue of customer service and quality, particularly in relation to ISO 9000 for transport operations. It is planned to include this on the UK visit at the request of the delegates.

KHT/DC
18.6.96

ANNEX J

A FULL SET OF DELEGATE' s MATERIAL FOR THE ALMATY SEMINAR

TRACECA - Improvement of Road Transport Services - Central Asia

Regional Workshop on Transport Regulations and the Management of Transport Operations

June 10 - June 14 1996
at the
Sanatorium Alatau,
Almaty,
Kazakhstan

Course Programme

Group 1	Group 2
Regulations Manager - Ministry of Transport	Business Manager - Transport Association
Business Manager - Joint Stock Enterprise	Business Manager - Independent Enterprise
Technical Expert - Research Institute	Training Manager - Transport Association

The purpose of the Workshop is to explore fully the issues involved in regulating road freight transport in Central Asia and to provide technical assistance to independent operators and transport associations in business management. The Transport Business Management stream on Days 2, 3 and 4 will include practical exercises. The content of all discussion sessions will be noted and the main points published as a record of the workshop.

Day 1 Monday June 10 1996

Group 1 and Group 2

09.00 Introduction to Workshop and Business Pilots
09.30 Regulations in Freight Transport
- The current European situation
10.45 Coffee
11.15 Regulations in Freight Transport
- The current Central Asian situation
12.15 Discussion - The need for a Compliance Schedule

13.00 Lunch

14.00 Presentation by Iveco-Ford
- Vehicle supply and maintenance in Central Asia

17.00 End of Day 1

19.30 Dinner with Iveco-Ford

Day 2 Tuesday June 11 1996

Group 1 and Group 2
09.00 Introduction to Regulations
10.00 Coffee

Group 1 - Transport Regulation

10.30 Vehicle Weights & Dimensions
12.00 Construction and Use of Vehicles
13.00 Lunch
14.00 Testing and Plating of Vehicles
15.30 Tea
16.00 Enforcement Regimes

Group 2 - Transport Business Management

10.30 Introduction to Marketing
12.00 Market Research
13.00 Lunch
14.00 Marketing and Quality
15.30 Tea
16.00 The Marketing Action Plan

Group 1 and Group 2
17.00 Discussion
17.30 End of Day 2

Day 3 Wednesday June 12 1996

Group 1 and Group 2
09.00 Introduction to Regulations
10.00 Coffee

Group 1 - Transport Regulation

10.30 Driver Licensing
12.00 Drivers Hours and Tachographs
13.00 Lunch
14.00 Hazardous Cargoes

Group 2 - Transport Business Management

10.30 Introduction to Operations
12.00 Costing and Pricing Services
13.00 Lunch
14.00 Making Assets Work

Group 1 and Group 2
15.00 Discussion
15.30 Tea
16.00 **Presentation by Sealand**
- Distribution of European goods in Central Asia - the need for reliability

18.00 End of Day 3

19.30 **Dinner with Sealand**

Day 4 Thursday June 13 1996

Group 1 and Group 2

09.00 Introduction to Regulations
10.00 Coffee

Group 1 - Transport Regulation		Group 2 - Transport Business Management	
10.30	Conditions of Carriage	10.30	Introduction to Accounting
12.00	TIR Carnets	12.00	Management Accounts
13.00	Lunch	13.00	Lunch
14.00	Operator Licensing	14.00	Budgeting and Monitoring
15.30	Tea	15.30	Tea
16.00	Compliance Schedules	16.00	Financial Accounting

Group 1 and Group 2

17.00 Discussion
18.00 End of Day 4

Day 5 Friday June 14 1996

Group 1 - Transport Regulation		Group 2 - Transport Business Management	
09.00	Compliance Schedules	09.00	Compiling the Business Plan
10.30	Summary of Regulations	10.30	Monitoring Performance
11.00	Coffee	11.00	Coffee

Group 1 and Group 2

11.30 The Business Pilots
12.00 Introduction to the UK Study Tour
12.30 Workshop Summary and Evaluation
13.00 End of Workshop

Workshop Presenters

Dr Mick Jackson	Project Manager, Sir Alexander Gibb & Partners, London
Mr Keith Taylor	Executive Director - Personnel & Business Services, The Freight Transport Association, London
Mr David Aubrey	Transport Consultant, Sir Alexander Gibb & Partners, London
Mr Alex Boulting	Transport Economist, Sir Alexander Gibb & Partners, London
Mr Valery Anokhin	Iveco Trucks, Almaty
Mr Mac Viers	Sealand Service International, Tashkent
Mr Eduard Kaplan	NIIAT Scientific Research Institute of Road Transport, Almaty
Mr Gafur Zakirov	TADI Scientific Research Institute of Road Transport, Tashkent

СПИСОК ДЕЛЕГАТОВ

No	Имя	Организация	Группа No	Страна
1	Закиров Гафур Zakirov Gafur	Ташкентский Автодорожный Институт Декан экономического факультета	1	Узбекистан
2	Рамазанов Хасан Ramazanov Hasan	АО "Орта Азия Транс" Ведущий специалист отдела перевозок	1	Узбекистан
3	Касымов Бахтияр Kasimov Bakhtiyar	Ассоциация международных авто-перевозок Генеральный секретарь	2	Узбекистан
4	Магай Галина Magay Galina	Корпорация "Узавтотранс" Экономист	1	Узбекистан
5	Абдуллаев Миржалил Abdullaev Mirjalil	Ассоциация международных авто-перевозок Инструктор	2	Узбекистан
6	Ярошевич Yaroshevich	"Узинтранс"	2	Узбекистан
7	Гулов Якуб Gulov Yakub	Минтрансдорхоз, отдел приватизации Начальник отдела	2	Таджикистан
8	Фазлоншоев Бахтовар Fazlonshoev Bakhtovar	"Континент Транс" Президент	2	Таджикистан
9	Рахимов Халим Rahimov Halim	Минтрансдорхоз Начальник автопредприятия No 10	1	Таджикистан
10	Еribеков Мирали Yoribekov Mirali	Председатель арендного предприятия "Автобус"	1	Таджикистан
11	Джумакулиев Акмурат Junakoliev Akmurat	"Туркменвнештранс" Зам. Генерального директора	1	Туркменистан
12	Джепбаров Сердар Jepbarov Serdar	Министерство Автотранспорта Начальник Управления Внешнеэкономических Связей и Международных Перевозок	1	Туркменистан
13	Ермолаев В Yermolaev V.	ТАСМАП Генеральный секретарь	2	Туркменистан
14	Ялдыров Н. Yaldirov N.	ТАСМАП Инструктор	2	Туркменистан
15	Логунов Александр Logunov Alexander	Министерство Транспорта и Коммуникаций Директор Департамента автомобильного транспорта	1	Казахстан
16	Ибрагимов Сакен Ibragimov Saken	КазАТО Генеральный директор	2	Казахстан
17	Ахметжанов Женис Akhmetzhanov Jenis	КазАТО Зам. Генерального директора	2	Казахстан
18	Алдабергенов Болат Aldabergenov Bolat	НИИАТ Старший научный сотрудник	1	Казахстан
19	Ибрагимов Камиль Ibragimov Kamil	Транспортный отдел "БАЯН-АУЛ" Начальник Транспортного Отдела	2	Казахстан
20	Раисов Ермухан Raisov Yermukhan	"Ер-Керуен", АО Генеральный директор	1	Казахстан
21	Абакиров Сурынбек Abakirov Surinbek	Кыргызский Технический Университет Декан Факультета	2	Кыргызия
22	Ирсалиев Алмазбек Irsaliev Almazbek	Министерство Транспорта Начальник Отдела Внешэкономических Связей	1	Кыргызия
23	Шарапов Жолболду Sharapov Zholboldu	КТЭОМП "Кыргызвнештранс" Генеральный директор	1	Кыргызия
24		Министерство Транспорта	1	Кыргызия

Tacis

SESSION I - EU TRANSPORT MARKET & INSTITUTIONS

Let me start by introducing myself and telling you a little bit about the organisation I work for.

SLIDE

My name is Keith Taylor and for the past ten years I have worked for the Freight Transport Association.

My position is that of Director of Personnel and Business Services.

The Freight Transport Association is based in Tunbridge Wells, England quite close to London. It was founded in 1889 and has a long history as an employers' organisation representing the transport interests of Britain's trade and industry.

We have 5 offices across the UK, a Management Training College and an office in Brussels.

There are 12,000 member companies in membership of FTA and we cover all modes of transport - road, rail, sea and air.

The FTA itself has 350 employees. We do not operate vehicles ourselves. Our purpose in life is to help those member companies who do, by offering a range of services, such as:

- Legal advice
- Vehicle Inspections
- Tachograph chart analysis

- Consultancy
- Training
- International haulage through the issue of TIR carnets
- Publications
- Representation

FTA are members of the IRU and the current presidency is held by FTA through our director general - David Green.

I too have a heavy involvement with IRU through the Training Experts Group, where I am a member of the Management Steering Group as President of EUROTRA, the European Organisation of Training Organisations.

We have a great deal of experience in working with people like yourselves from the Former Soviet Union. We have been involved in helping ASMAP, Moscow to establish their association to be run on Western European lines and to establish their training centre to offer CPC (Access to the Profession) courses and an examination regime. We have established a Transport Training Centre in Kiev in the Ukraine and we have trained 180 people from the Russian Inspection Service of the Ministry of Transport.

Indeed, I think some of you have visited us in England.

Enough about us - we are here to exchange information with you and to provide some practical help and assistance to you so that you too can operate and trade profitably and successfully in the world's markets.

SLIDE

I am going to start by talking about the international institutions which impact and regulate the movement of goods by road.

Tacis

SLIDE

Firstly, the United Nations. Three UN conventions impact on international transport today:-

- The Paris Convention of 1926
- The Geneva Convention of 1949
- The Vienna Convention of 1968

88 countries have signed the Geneva convention and over 30 are contracting parties to the Vienna convention.

The conventions cover such things as construction and use of motor vehicles, rules of the road, weights and dimensions of vehicles etc.

Other bodies which have and still have an influence on the movement of goods by road are:-

- Economic Commission for Europe (ECE)
  which has brought about some order in terms of TIR, pallets, containers
- Inland Transport Committee
  which has brought about developments such as the E road system in Europe. CMR uniform road signs. ATP (perishable food stuffs).
- European Conference of Ministers of Transport (ECMT)
  comprising 31 countries with 2 observers and 6 associates, including USA, Canada and Japan. They mostly deal with political issues of a non technical nature, e.g. ECMT quotas for tramping permits.

And then there is the EU whose objectives were set out in the Treaty of Rome to be:-

- elimination of Customs duties and quantitative restrictions in trade
- establishing a common tariff against imports
- abolition of obstacles to the free movement of persons, goods, services and capital
- common policies for agriculture and transport
- measures to prevent competition being distorted.

SLIDE

The EU institutions comprise 4 main ones:-

- The Council of Ministers
- The European Commission
- The European Parliament
- The European Court of Justice.

The Council of Ministers is the body which takes all major decisions.

The Commission could be regarded as the EU civil service with it's headquarters in Brussels.

SLIDE

The following chart shows the interaction of the various institutions.

The Parliament consists of 626 members elected from member states and they meet in Strasbourg. It is responsible for approving the EU budget.

The European Court of Justice consists of 15 judges appointed for a 6 year term and sits in Luxembourg. Basically, its role is to sit in judgment to interpret Community Law.

There are 2 types of EU legislative instruments:-

Regulations	-	are fully binding on all member states
Directives	-	are binding only as to the result to be achieved. Each country is left to decide the means.

SLIDE

Let's now take a brief look at the nature of the transport market in the EU, the forces of change which are at work and the business strategies being adopted by road transport companies.

SLIDE

I plan to discuss this in terms of:

- Size and Growth of the Sector
- Transport Mode shares and trends
- National and International transport
- Hire & Reward v Own Account

For a variety of reasons, demand for goods transport is showing an increase. Compared with other modes, road transport scores highly because of its ease of availability, flexibility, frequency and speed.

There are normally two indicators used to measure the size of the road transport sector - Transported tons and tonKilometres.

2 SLIDES

The importance of road transport as compared with other modes is shown on the next slide.

SLIDE

The next slide illustrates that the most important part of road transport is national transportation. Just under 21% of all tonKilometres made by EU countries were international journeys. Clearly geographical location plays a very important part in these statistics.

On the subject of Hire & Reward and Own Account, it is important to understand the difference. Own account transport is carried out as a support service to a core business. These companies do not outsource their transport needs but fulfill them in house. Road transport of freight is the core business for companies who are classed as hire and reward.

SLIDE

The next slide shows the proportion of hire & reward transport in each of the EU countries. You will also see that the trend of outsourcing is increasing.

I said earlier that we would look at the forces of change which are shaping the development of the road transport sector across Europe and how these are shaping business strategies.

SLIDE

The next slide summarises these.

Quality issues and customer service in response to increasing customer demands is an area of growing importance.

ISO 9000 (ISO: International Organisation for Standardisation) is a set of generic standards that provide quality assurance requirements. Transport

companies all over Europe are now striving to meet these standards.

SLIDE

The next slide shows the number of certificates issued worldwide up to 1994.

Let me now turn to environmental issues. Some countries are particularly concerned about the issue because of the increase in transit traffic across their road networks. These are:-

SLIDE

There are a number of measures being taken as the following slides show.

Lastly, let me now turn to Business Strategies.

It is possible to group road transport companies on the basis of business strategies they are following. The following slide presents a summary of the typical company profiles for each type of business strategy using 4 company characteristics - size, technology, geography, market.

SLIDE

When we talk about size the following slide gives you a good indication of the size structure of transport companies in the EU.

Tacis

WEIGHTS & DIMENSIONS OF VEHICLES

EU Directive 85/3 as amended sets common standards for the weight and dimension of motor vehicles, trailers and combinations. Member states have to allow across their borders vehicles meeting these standards.

The upper weight limits of the Directive are:-

SLIDE

You will not be surprised to know that the law on maximum permitted gross weights is a lot more complicated that this, being based on a number of factors, including the distances between the axles and the technical/legal capacity of these axles. Basically these rules exist to spread the load out over the road surface. As a general rule the formula used here calls for an outer axle spread of 1 metre for every 5 tonnes of gross vehicle weight.

Let's now have a brief look at the types of vehicles and their maximum gross weights with various axle configurations.

SLIDE 1. 2 axled rigids

SLIDE 2. 3 axled rigids

SLIDE 3. 4 axled rigids

SLIDE 4. Road Trains

SLIDE 5. Articulated - 2 axled tractive unit

SLIDE 6. Articulated - 3 axled tractive unit

The next area I need to look at is vehicle dimensions. First of all I want to look at the EU regulations covering overall length of the vehicle. You would imagine that this would be easy to define - not so. To illustrate the point - is a tail lift considered to be part of the vehicle or part of the load? Also, the

other complication concerns the case of a tractive unit and semi-trailer combination which "bends" in the middle.

In fact, several items are excluded from the measuring process:-

- a snow plough
- any tailboard which is let down whilst the vehicle is stationary
- any sheeting for covering the load.

In practice the length is determined when the truck and trailer are in line ahead.

SLIDE

The following slide shows the EU maximum permitted lengths of the different types of vehicles.

SLIDE The maximum permitted widths are shown on the next slide. Generally the limit is 2.5 metres. This excludes mirrors and direction indicators.

There is a concession for refrigerated vehicles to go up to 2.6 metres but the sidewalls of the vehicle must be 45mm thick.

So far as height is concerned, never operate a vehicle internationally over 4 metres. You will not pass under the bridges of many countries and you will certainly not get on any of the ferries.

The attached appendix summarises the position in many European countries.

Tacis

DRIVERS' HOURS

The EU rules on drivers' hours apply to drivers of most goods vehicles over 3.5 tonnes. They apply to any road journey of a goods or passenger vehicle, whether laden or not.

The rules apply to any person who drives the vehicle even for a short period or who is carried in order to be available for driving if necessary. Driving is regarded as any time spent at the driving controls of a vehicle. Rest is defined as any uninterrupted period of **at least an hour** when the driver is free to spend the time as he chooses.

The rules define a week as the period between 00.00 hours on Monday and 24.00 hours on Sunday. A day is generally any 24 hour period.

SLIDE

The EU rules are set out on the following Slides.

The purpose of the regulations is road safety, and any payment schemes/bonus schemes which pay drivers in relation to distance travelled and/or the amount of goods carried are prohibited if such payments are deemed to endanger road safety.

There are a number of exemptions to the rules as shown on the next slide.

SLIDE

Tacis

TACHOGRAPHS

Vehicles affected

Most goods vehicles over 3.5 tonnes and most large passenger vehicles must be fitted with an EU type approved tachograph.

Drivers must use the tachograph to record their activities. Vehicles of less than 3.5 tonnes and the exemptions listed on my slide do not require tachographs.

Type of Tachograph required

The tachograph must conform to the detailed specification in the regulations. It must be able to record:-

- distance travelled
- speed
- driving time
- other periods of work or attendance at work by the driver
- breaks and daily rest periods

Calibration and Sealing

The tachograph has to be calibrated and sealed before the vehicle goes into service and after repair.

Tachographs must be checked every two years and re-calibrated every six years.

Drivers' Responsibilities

- Use the chart each day when he takes over the vehicle
- leave chart in vehicle to record rest periods
- chart should not be used for more than 24 hours
- make necessary entries on the chart
- keep charts for current fixed week and the chart for the last day of the previous week - for enforcement
- return charts to employer within 21 days of completion

There are a few other obligations but importantly the driver must ensure that the time recorded agrees with the official time in **the country of registration of the vehicle**.

Enforcement and Inspection

Ministry of Transport staff and police have wide powers to inspect drivers' tachograph charts. In the UK fines are up to £2500 ($3750) and both operators licences and driver licences can be refused for violations.

Tacis

DRIVER LICENSING

From 1996 the system in the EU has been changed and harmonised. There are new classes for drivers:-

SLIDE I draw your attention to classes C, D and E

The procedures for licensing are as follows:-

SLIDE **Application** - accompanied with a test pass certificate

Renewals - expiring licences

- medical report if aged 45 or over

Additional requirements

- applicant must not be suspended or disqualified
- hold a full category A or B licence
- be age 21 or over
- be fit

Cost and duration

For goods vehicle drivers, licences last for 5 years or through to 45th birthday.

From age 65 renewal is annually.

Renewal licences cost £21 or $32.

Tacis

Medical reports

Are required on first application and on each renewal application from the age of 45. There is a cost for the medical report. In the UK this is circa £55 or $82.

Certain medical conditions ban applicants from holding goods vehicle licences. These are:-

- epilepsy
- abnormal sight in one or both eyes
- insulin treated diabetes

Suspension and Revocation

A goods vehicle licence may be suspended or revoked at any time because of misconduct or physical disability. If any diseases mentioned above develop or if the driver suffers from heart problems, these must be notified to the authorities.

LGV Driving Test

The candidate must provide a vehicle of the appropriate category.

Staged testing

New drivers have to be qualified in a lower category of entitlement before seeking entitlement in a higher category. They have to:-

1. Hold a full category B before applying for a provisional entitlement to drive larger vehicles.
2. Pass a category C before taking C + E.
3. Pass a category C1 before taking C1 + E.

In addition to the practical test there is now a theory test of 35 multiple choice questions prior to the practical test.

Tacis

PLATING & TESTING OF VEHICLES

Most large goods vehicles and trailers are subject to plating and annual testing. How this is done varies across the EU, but the standards are the same. In the UK it is done at a Ministry of Transport Goods Vehicle Testing Station.

At the time of first registration, the vehicle's axle and gross weights are assessed and recorded on a Ministry Plate showing the maximum gross weight at which it may be operated.

A test of roadworthiness must thereafter be carried out every 12 months.

Vehicles covered

All articulated vehicles and other load carrying commercial vehicles over 3.5 tonnes, all semi-trailers and trailers over 1020 kg.

Manufacturers Plate

Is a plate usually fixed to the chassis on the near-side or in the driver's cab on the nearside showing:-

- manufacturers name
- vehicle type
- engine type and power
- chassis or serial number
- number of axles
- maximum axle weight for each axle
- maximum gross weight
- maximum train weight

and similar information for trailers.

Special Types

A vehicle used to carry abnormal, indivisible loads display a plate showing the recommended weights which should not be exceeded.

Annual Testing

After initial testing, vehicles and trailers have to be tested annually. A vehicle must not go more than 12 months without a test.

There are a series of conditions attaching to the appointment, testing procedure and documentation.

There is also a tester's manual which details all of the items covered - SHOW COPY.

When you visit the UK we will ensure that you see the entire process and a visit to a Vehicle Testing Station will be arranged.

Test Certificate

A test certificate is issued by the test station on successful completion and is valid for one year.

If it is not possible to conduct the test before the expiry date a special certificate of temporary exemption is required, which lasts for no more than 3 months.

Mechanical breakdown is not an acceptable reason.

Tacis

THE TIR CONVENTION

TIR is an international Convention introduced by the Economic Commission for Europe under the auspices of the United Nations. The original Convention was introduced in 1959 although this has now been replaced by the subsequent 1975 Convention. The underlying purpose of the system is to allow goods carrying vehicles to be sealed at their office of departure and to travel generally unhindered, other than for checks on seals and documentation, to the office of destination.

The Convention is in two parts which deal with the approval of vehicles and containers for use under TIR and the documentary rules governing the issue of the TIR carnet. There are 54 countries which are contracting parties to the Convention as at September 1994.

The list includes all EU countries.

The TIR carnet

The carnet is a document containing pairs of vouchers with corresponding counterfoils bound in a cover with one voucher being given up on entry to each country and another on exit. Provided a country has two copies of a sheet from a TIR carnet it can be reasonably certain that the goods have both entered and left their territories and therefore the movement has been satisfactorily completed so far as they are concerned. Where TIR is used to transit EU territory, the whole of the EU is regarded as being a single country for TIR purposes and so one voucher is removed from the carnet on entry to the EU and another on exit or clearance.

The carnet and the goods must be presented at the offices of departure and destination, as well as at Customs offices on the border crossings en route.

The carnet itself is available in two different sizes. The 14 volet carnet is good for journeys involving no more than seven countries including the countries of departure and destination. The 20 volet carnet, which can cover up to 10 countries, is recommended for Middle East traffic and longer journeys to eastern Europe. Both 14 and 20 volet carnets are valid for 45 days and must be presented at the Customs office of departure before the expiry date.

Transport operations under cover of the TIR carnet may involve several Customs offices of departure and destination, but the total number of offices (of departure AND destination) cannot exceed four. Also, the acceptance of the TIR carnet by all the Customs offices of departure must take place before it is presented to a Customs office of destination.

The International Road Transport Union (IRU) is the international issuing body and appoints national member organisations to issue carnets in their own countries. FTA's carnets are only available to members of its international group and a £3,500 or £33,000 (to cover sensitive goods) guarantee must be established and strict criteria met before a company can be issued with TIR carnets.

Approval of vehicles and containers for TIR use

Before a vehicle or container can be used under the TIR scheme, it must be approved by the relevant authority in the operator's home country to ensure compliance with the requirements of the Convention. In the UK this work is carried out in respect of vehicles at testing stations run by the Department of Transport's Traffic Area Offices and, once approved, a certificate of approval

is issued which is valid for two years and which must be carried on the vehicle when it is on a TIR journey.

The purpose of the approval test is to determine whether the vehicle or container is acceptable for international transport under Customs seal. The basic requirements are that:-

1. Customs seals can be simply and effectively applied to the container or load compartment of the vehicle;
2. no goods can be removed from, or introduced into, the container or sealed part of the vehicle without leaving obvious traces of tampering or without breaking the Customs seal;
3. the vehicle or container must contain no concealed spaces where goods could be hidden;
4. all spaces capable of holding goods must be readily accessible for Customs inspection.

Heavy or bulky goods

Because of the approval requirements listed, it is usually possible to use open vehicles for carriage under TIR. There are, however, special arrangements for heavy or bulky goods which cannot easily be dismantled for transport.

Such loads may be carried under what is known as 'open TIR' if the Customs authority in the exporting country is satisfied that:-

1. they cannot readily be carried in approved containers or vehicles;
2. they can be easily identified from the description on the carnet vouchers;

3. the carrying vehicle or container has no concealed spaces where other goods may be hidden.

Additionally the issuing association must make a special endorsement on the carnet, and it is therefore essential that operators advise the issuing association that they require an open carnet at the time that it is ordered.

Tobacco, alcohol and TIR carnets

The special high value carnets required for the carriage of cigarettes or spirits were suspended by the IRU with effect from November 1994.

Carriage of sensitive goods

The IRU introduced rules for the carriage of 'sensitive goods'. These goods are broadly defined as meat of any type or origin, including livestock; milk, including powdered milk; butter and sugar.

Carriers involved in transporting any goods which are within these categories must be registered with their national issuing association for the carriage of sensitive goods and must have lodged an additional guarantee of £33,000. In addition, they must advise the issuing association in advance whether they wish to carry such goods under cover of a TIR in order that the carnet can be clearly identified with a special stamp as being used for sensitive goods.

TIR plates

Vehicles used on a TIR journey must display, at front and rear, a blue plate with the letters 'TIR' in white. The plate must measure 250mm by 400mm and the letters must be 200mm high with stroke widths of at least 20mm. The plate must be clearly visible when the vehicle is engaged on a TIR journey and must be capable of being removed or covered when it is not.

Discharge of TIR carnets

From time to time difficulties arise because drivers do not ensure that Customs clearance of the cargo has taken place prior to final delivery. Often, the driver will accept in good faith assurances by the consignee that the latter will deal with Customs clearance. Clearly this is a dangerous practice which has given rise to a number of Customs claims and which should be avoided. Drivers should be instructed to obtain the proper discharge of the document and to bring it back with them.

Tacis

CONSTRUCTION & USE OF VEHICLES

In constructing vehicles and trailers, manufacturers are bound by extensive regulations governing:-

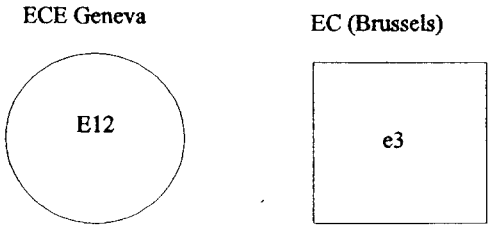
- length and width as we have discussed
- maximum weights
- lighting equipment
- brakes
- tyres
- mirrors
- windscreen wipers and washers
- silencers
- speedometers
- horns
- noise

In operating vehicles and trailers, owners and operators are restricted by further regulations governing their use.

I will first of all talk about what is known as TYPE APPROVAL. This is a term used to describe the system whereby a vehicle or vehicle components such as tyres, safety glass, seat belts, mirrors etc or vehicle system such as brakes, steering or exhaust emission can be tested and approved to prescribed standards.

Historically individual countries had their own schemes, now they are being harmonised across all EU countries.

Components are now being marked by one of two organisations:-



For new goods vehicle, truck manufacturers have to certify conformity on standards for 5 items. These are:-

- power to weight ratio
- noise and silencers
- brakes
- exhaust emissions
- radio interference suppression

No vehicle can be registered without a Certificate of Conformity for Vehicle Type Approval which is issued by the Ministry of Transport.

The following is a brief summary of the main construction and use regulations:-

1. **Audible warning devices**
   - all vehicles except works trucks must be fitted with a horn - musical and multi-tone are prohibited.

- Gongs, bells and sirens only permitted on emergency vehicles unless it is an anti-theft device.
- reversing alarms are now permitted

SLIDE 2. **Brakes**

All vehicles must meet specified brake requirements and braking efficiency standards.

The braking system must have two means of operation or two efficient braking systems each with its own means of operation.

The following efficiency standards apply:

Service brake	0.5g (or 50%)
Secondary brake	0.25g (or 25%)
Parking brake	capable of holding vehicle on gradient of 1 : 6.25 (16%)

There are also requirements for trailers.

3. **Height markings**

When the vehicle travelling height exceeds 3.66 metres, a cab notice is required stating the actual travelling height.

4. **Mirrors**

Every goods vehicle must have two mirrors fixed to the vehicle - one internal and one external on the off-side. If the internal mirror does not provide adequate vision then a second mirror must be fitted externally to the near side.

There are regulations about the extent of the projection of the mirrors.

5. **Overhang**

The maximum permitted overhang is 60% of the distance between the front axle and the point near the rear of the chassis from which the overhang is to be measured.

6. **Rear under-rim protection**

Is required on vehicles exceeding 3.5 tonnes and trailers with an unladen weight exceeding 1020 kg.

7. **Safety Glass**

Goods vehicles must have safety glass for windscreens and windows in front and on either side of the drivers seat.

8. **Sideguards**

Essentially on artics of more than 32.5 tonnes, the semi-trailer must have sideguards. Also if the semi-trailer itself exceeds 26 tonnes.

Also other vehicles exceeding 3.5 tonnes and trailers with unladen weight exceeding 1,020 kg must have sideguards fitted.

9. **Speedometers**

Must be fitted on all vehicles.

10. **Speed limiters**

Vehicles over 12 tonnes first used after 1.1.88 need a speed limiter set at 90 kph, as do vehicles over 7.5 tonnes used after 1.8.92.

11. **Tyres**

There are various regulations regarding tyres, but for vehicles under 3.5 tonnes the maximum tread depth is 1.6mm and 1mm for other vehicles.

There are many other specific regulations covering lighting and marking, windscreen wipers and washers, long vehicles, reflective signs, seat belts, smoke emission and so on.

Tacis

THE ADR AGREEMENT

1. Title and standing

The European Agreement concerning the International Carriage of Dangerous Goods by Road.

2. Purpose

The purpose of the Agreement is to ensure that dangerous goods transported by road will be able to cross European frontiers without hindrance provided:-

a) that the goods are packed and labelled in accordance with the Agreement, and

b) that the goods are carried in vehicles in accordance with the Agreement.

In addition the Agreement requires that tank vehicles carrying tank containers or demountable tanks and certain vehicles which carry explosives must undergo a technical inspection in their country of origin.

3. Contracting Parties

The following countries are Contracting Parties of ADR:

Austria	Denmark	Luxembourg	Slovakia
Belgium	Finland	Netherlands	Slovenia
Belorussia	France	Norway	Spain
Bosnia - Herzegovina	Germany	Poland	Sweden
Bulgaria	Greece	Portugal	Switzerland
Croatia	Hungary	Romania	United Kingdom
Czech Republic	Italy	Russian Federation	Yugoslavia, Former Territories of

4. **Goods affected**

Under the Agreement, 'Dangerous Substances' include pure chemical products as well as certain types of mixtures and preparations containing them, including wastes. 'Dangerous Articles' include, for example, empty uncleaned receptacles and packages and aerosols.

5. **Classes**

The substances and articles of ADR are divided into nine classes in line with the Recommendations of the UN Committee of Experts on the Transport of Dangerous Goods, as follows:-

Class 1	Explosive substances and articles
Class 2	Gases: compressed liquefied or dissolved under pressure
Class 3	Flammable liquids
Class 4.1	Flammable solids
Class 4.2	Substances liable to spontaneous combustion
Class 4.3	Substances which give off flammable gases on contact with water
Class 5.1	Oxidising substances
Class 5.2	Organic peroxides
Class 6.1	Toxic substances
Class 6.2	Infectious substances
Class 7	Radioactive substances
Class 8	Corrosive substances
Class 9	Miscellaneous dangerous substances and articles

Tacis

6. **Transport Documentation**

When dangerous goods are being carried under the terms of the ADR Agreement the consignment must be accompanied by a transport document.

The consignor must advise the carrier in writing of the particulars to be included. The official language of the forwarding country must be used, but where this is not English, French or German, then one of these three languages must also be used.

The transport document should contain:

1. the substance identification number, i.e. UN number (if applicable)'
2. the name of the substance as specified in ADR;
3. the hazard class;
4. the ADR item number together with the item letter (if any);
5. the initials ADR (or RID);
   Example: UN1868 Decaborane, 4.1, 16° (b), ADR;
6. the number and a description of the packages;
7. the gross mass (also net for explosives) in grams or kilograms;
8. the name and address of the consignor;
9. the name and address of the consignee(s);
10. any other relevant statements, e.g. a declaration that the load does not exceed the exemption limits of ADR.

Written emergency instructions must also be carried. These should be provided to the carrier, at the latest, when the transport order is given. Although the Agreement does not lay down an exact format for the

document containing these instructions many operators provide a TREMCARD, i.e. Transport Emergency Card, to meet this requirement. The instructions must be provided in the language of the country of origin, and (where different) a major language of each country of transit and destination must be carried in the vehicle cab. The following information must be shown in the document(s):

a) the nature of the danger inherent in the dangerous substances being carried, and the safety measures that need to be taken;
b) the action to be taken and treatment to be given in the event of persons coming in contact with the goods;
c) the measures to be taken in case of fire and the fire-fighting equipment not to be used;
d) the measures to be taken in case of breakage or deterioration of packagings or of the dangerous substances being carried, particularly in respect of spillage over the road;
e) for aquatic pollutants the measures to be taken in the event of spillage to avoid or minimise damage to the aquatic environment.

In the case of certain tanker vehicles or vehicles carrying tank containers the instructions must contain the following additional information: the substance's name, its class, item number and letter, and its substance identification and hazard identification numbers.

(A number of other documents may have to be carried on a vehicle operating under ADR and are detailed under: 'Annex B - Carriers Responsibilities'.)

Tacis

7. **Vehicle markings**

Vehicles carrying dangerous substances under ADR in excess of the exempt quantities in Annexes A and B to the Agreement must display rectangular reflectorised orange coloured plates (40cm base x 30cm high with a black border not more than 15m wide) fixed vertically facing front and rear so as to be clearly visible.

In the case of tank vehicles carrying only one substance, the orange plate displayed front and rear must be divided horizontally in to two halves. The hazard identification code for the substance should be shown in the top half of the plate and the substance identification number (UN Number) in the bottom half.

The hazard identification code (known as the Kemler Code) for the top line of the plate comes from the following list:

2 Emission of gas due to pressure
3 Flammable liquid vapours and gases
4 Flammable solid
5 Oxidising substance
6 Toxic substance
8 Corrosive substance
9 Risk of spontaneously violent reaction

Doubling a figure indicates an intensification of the hazard, e.g. 66 means a very dangerous toxic substance. If a one figure number is sufficient then the second digit is 0.

Additionally, 22 indicates that a refrigerated gas is being carried. The addition of the prefix 'X' to the number indicates an absolute prohibition on the application of water to the product, e.g. X423 indicates a flammable solid which may give off a flammable gas on contact with water.

Where several substances are being carried in separate tank compartments, a separate plate containing the above information should be affixed to either side of the vehicle on the relevant individual compartment, and a blank plate should be displayed at the front and rear of the vehicle. The same requirements apply to vehicles carrying tank containers but the plates indicating the hazard identification code and the substance identification number must be affixed to the tank container itself rather than to the vehicle.

In addition to the orange plates tank vehicles and vehicles carrying tank containers must display appropriate hazard class labels (or diamonds). The labels (also known as placards) must be 250mm x 250mm.

Tank vehicles must show labels on both sides and at the rear, tank containers on all four vertical sides.

The orange plates and vehicle labels (placards) must be removed or covered once the vehicle has been unloaded, cleaned and/or degassed.

8. **Driver Training**

Drivers of tank vehicles or vehicles carrying tank containers which exceed 3,000 litres capacity and/or 3.5 tonnes maximum permissible weight (mpw), other drivers carrying packaged dangerous goods in

vehicles exceeding 3.5 tonnes and drivers of vehicles carrying explosives (subject to limited exemptions) have to be in possession of a recognised vocational training certificate.

To obtain a vocational certificate, a driver must attend an approved training course and pass approved examinations. The certificates are valid for five years. Drivers must carry their vocational driver training certificates at all times when ADR regulated loads are carried.

Tacis

NATURE OF THE ROAD TRANSPORT

SECTOR IN THE EC

Tacis

STRUCTURE OF THE SECTOR

- SIZE & GROWTH OF SECTOR
- TRANSPORT MODE SHARES & TRENDS
- NATIONAL & INTERNATIONAL
- HIRE & REWARD V OWN ACCOUNT

Tacis

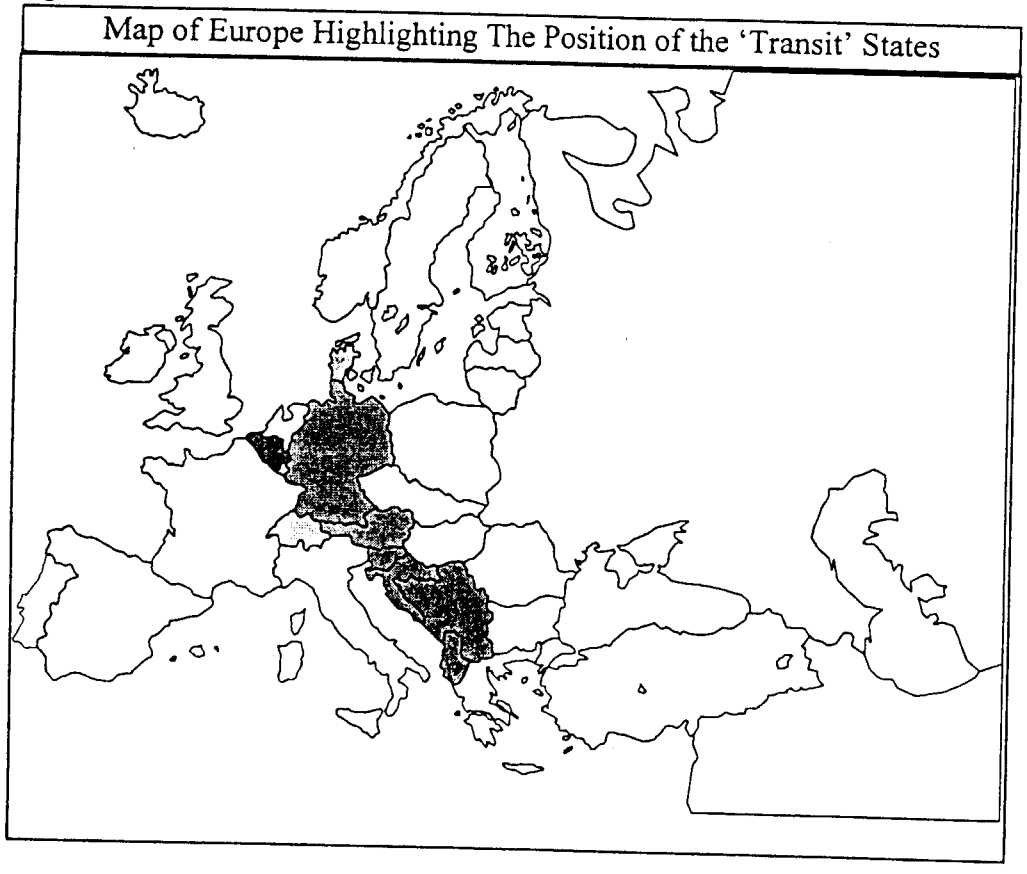
Figure 2.7- Forces of Change in the Road Transport Sector

Safety Issues	- driving time, speed and distance - vehicle construction and testing - regulations for drivers and road standards
Technology Developments	- admin & operations, IT & EDI - vehicle technology - road infrastructure
Quality Issues	- ISO Certification - customer demands and customer care - impact of new technologies
Legal Requirements and Changes	
Flexibility and Customer Demands	
Green Issues	- transit traffic - pollution - fuel efficiency - alternative transport modes

Tacis

Figure 2.11

Map of Europe Highlighting The Position of the 'Transit' States



Tacis

MEASURES TO CONTROL THE ENVIRONMENTAL IMPACT OF ROAD TRANSPORT

Technical Measures

Emission standards on CO, VOCs NOx and particulates for all kinds of motor vehicles (e.g. by the EC and UNECE);
Fuel quality standards concerning for example lead, sulphur, benzene (e.g. by the EC);
Noise standards for motor vehicles (by the EC);
Development of electric cars and fuel cells.

Tacis

Construction Measures

Noise protection walls along major roads and motorways, low-noise asphalt;

Bridges and tunnels for animal crossings;

Integration of infrastructure into landscape (e.g. via environmental impact assessment).

Tacis

Transport Planning and Traffic Management

Provision and improvement of public transport facilities;
Provision of separate cycling tracks;
Restriction of car use in inner cities and residential areas via parking restrictions, Pedestrian zones, speed limitations, road safety measures;
Extension of rail, waterway and combined transport;
Bans on through traffic.

Tacis

Economic Instruments

Internalisation of external costs for all transport modes through taxes and fees (e.g. energy tax, fuel tax, road pricing and parking fees);

Differentiated purchase taxes e.g. between leaded and unleaded petrol;

Scrappage benefits to encourage owners to replace older polluting vehicles with cleaner vehicles fitted with catalytic converters.

Tacis

Others

Regular in-service test for motor vehicles;
Time restriction on transport movements, especially bans on night and weekend driving for trucks;
Lowering and enforcement of speed limits;
Encouraging smoother driving behaviour;
Educational campaigns;
Car pooling;
Staggered working hours; encouraging working from home;
Carrying through existing resolutions (e.g. ECMT resolutions on Transport and Environment (no 66) and Power and Speed (No 91/5) and conventions (e.g. UNECE Sofia protocol on NOx emissions, 1988).

Figure 2.16 Typical Company Profiles per Each Business Strategy

	Size	Technological Capabilities	Geographical Area	Market
Low-Cost	small	lo-tech	focused area	niche
Hi-Quality	small *or* large	hi-tech *or* lo-tech	wide *or* focused	niche *or* broad
Specialis-ations	small *or* large	hi-tech	wide *or* focused	niche
Integrated logistics	large	hi-tech	wide area	broad

Figure 2.18: Number of Road Haulage Firms and Size Distribution by Member State

Member State Vehicles	No of Firms	1-5 Vehicles (%)	6-10 Vehicles (%)	> 10
B	7812	73.5	10.9	15.4
D	44572	88.7	7.7	3.6
GR	26994	98.5	1.5	-
E	164976	98.4	1.4	0.2
F	28895	80.0	7.5	12.5
IRL		79.3	20.7	-
I	204119	95.0	3.1	1.8
NL	7390	70.6	15.9	13.5
UK	40000	85.5	7.8	6.7

Source: European Economy: Social Europe, Number 3, 1993/IRU

GOODS TRANSPORT – FREIGHT TRAFFIC TRENDS

TRANSPORT MODE	TRAFFIC VOLUME IN TONNE-KILOMETRES			FORECAST
	1985	1990	1985/1990	2010
ROAD	711.62	912.72	+28.26%	1442
RAIL	249.85	245.16	-1.88%	247
INLAND WATERWAY	70.00	72.54	+3.63%	118
PIPELINE	94.93	117.28	23.54%	–
TOTAL	1126.40	1347.70	+19.65%	–

GOODS VEHICLE FLEETS

CONTINENT/COUNTRY	1985	1990
EUROPE	15,046,598	18,201,303
12 EC STATES	11,655,452	14,170,778

Tacis

ROAD TRANSPORT UNDERTAKING IN %

COUNTRY	1-5 VEHICLES		6-10 VEHICLES		11+ VEHICLES	
	1985	1990	1985	1990	1985	1990
AUSTRIA	67.6	60.1	23.3	25.8	9.1	14.1
BELGIUM	73.5	68.3	10.9	11.6	15.4	20.1
DENMARK	89.4	83.7	6.1	9.3	4.5	5.3
FINLAND	94.7	95.8	2.4	2.1	0.9	1.1
FRANCE	80.0	81.6	7.5	5.6	12.5	12.8
GERMANY	88.7	83.1	7.7	9.7	3.6	7.2
ITALY	95.0	–	3.1	–	1.8	–
NETHERLANDS	64.5	56.8	19.8	20.9	15.6	21.7
SPAIN	98.4	–	1.4	–	0.2	–
SWEDEN	92.7	91.0	4.3	6.0	3.0	3.0
UNITED KINGDOM	87.0	83.0	7.0	8.0	6.0	9.0

CERTIFICATE OF PROFESSIONAL COMPETENCE

Tacis

MODULE A – CORE

(Common to Road Haulage & Passenger Transport)

MODULE CONTENT

Part 1: Law
Elements of Law
Business and Company Law
Social Legislation

Part 2: Business and Financial Management
Financial Management Techniques
Commercial Business Conduct
General Insurance

Part 3: Road Safety
Traffic Legislation

Tacis

MODULE B – NATIONAL ROAD HAULAGE

MODULE CONTENT

Part 1: Law
Taxation

Part 2: Road Haulage Business and Financial Management
Marketing
Commercial Conduct of the Business
Insurance in respect of Vehicles and Goods in Transit
Methods of Operating

Part 3: Access to the Market
Operating Licensing

Tacis

MODULE B – NATIONAL ROAD HAULAGE

MODULE CONTENT

Part 4: Technical Standards and Aspects of Operations
Weights and Dimensions of Vehicles and Loads
Vehicle Selection
Vehicle Condition, Fitness and Maintenance
Loading of Vehicles and Transit of Goods

Part 5: Road Safety
Drivers' Hours and Records
Driving Licences
Speed Limits
Procedures in Case of Road Traffic Accidents

Tacis

MODULE D – INTERNATIONAL ROAD HAULAGE

MODULE CONTENT

HARZARDOUS CARGO – THE ADR AGREEMENT

- PURPOSE
- JOURNEYS AFFECTED
- CONTRACTING PARTIES
- GOODS AFFECTED
- CLASSES
- CONSIGNOR RESPONSIBILITIES
- CARRIER RESPONSIBILITIES

PLATING AND TESTING OF VEHICLES

- VEHICLES COVERED
- MANUFACTURERS PLATE
- SPECIAL TYPES
- ANNUAL TESTING
- TEST CERTIFICATES
- DEPARTMENT OF TRANSPORT PLATE
- TRAILERS

Tacis

WEIGHTS AND DIMENSIONS

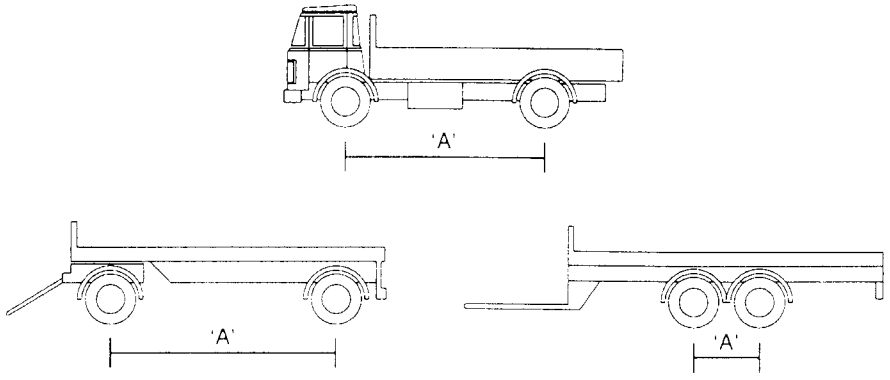
Two-axled rigid motor vehicle	18 tonnes
Three-axled rigid motor vehicle	26 tonnes
Four-axled rigid motor vehicle	32 tonnes
Four-axled articulated vehicle	38 tonnes
Five and six-axled articulated vehicle and drawbar combination	40 tonnes*

The directive also sets limits on individual axle and bogie weights:

Single-axle	11.5 tonnes
Two-axled bogie (motor vehicle)	19 tonnes
Two-axled bogie (trailer)	20 tonnes
Three-axled bogie (trailer)	24 tonnes

* 44 tonnes on a five or more axled vehicle when a 40ft ISO container is carried as part of a combined transport operation.

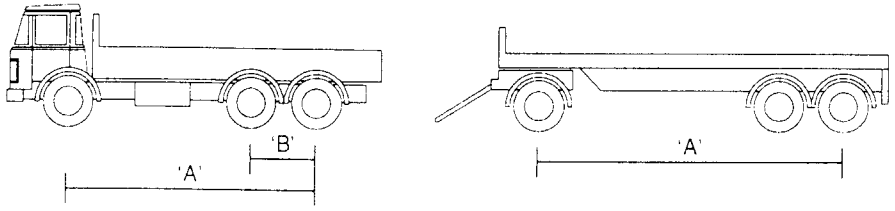
RIGID VEHICLE WEIGHTS – 2 AXLED



Distance 'A'	Maximum gross vehicle/trailer weight
Less than 2.65m	14,230kg
at least 2.65m but less than 3.0m	16,260kg
at least 3.0m	17,000kg
at least 3.0m	18,000kg*

* on a trailer only

RIGID VEHICLE WEIGHTS – 3 AXLED

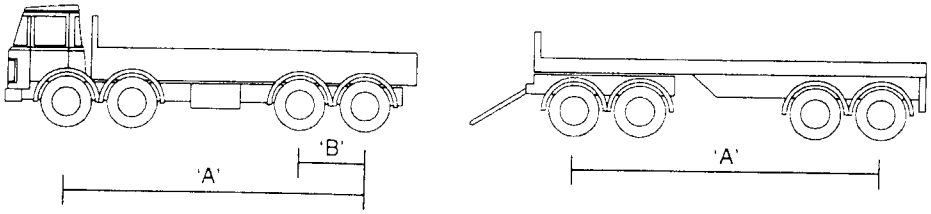


Distance 'A'	Maximum gross vehicle/trailer weight
Less than 3.0m	16,260kg
at least 3.0m but less than 3.2m	18,290kg
at least 3.2m but less than 3.9m	20,330kg
at least 3.9m but less than 4.9m	22,360kg
at least 4.9m	25,000kg
at least 5.2m	26,000kg*

* Only on a motor vehicle and provided:

1 every non-steering driving axle has twin tyres; and
2 either every driving axle has road friendly suspension or no closely spaced axle ('B') has an axle weight over 9,500kg.

RIGID VEHICLE WEIGHTS – 4 AXLED



Distance 'A'	Maximum gross vehicle/trailer weight
Less than 3.0m	16,260kg
at least 3.0m but less than 3.2m	18,290kg
at least 3.2m but less than 3.9m	20,330kg
at least 3.9m but less than 4.9m	22,360kg
at least 4.9m but less than 5.6m	25,000kg
at least 5.6m but less than 5.9m	26,420kg
at least 5.9m but less than 6.3m	28,450kg
at least 6.3m	30,000kg or 30,490kg† (see overleaf)
at least 5.2m but less than 6.4m Example: Distance 'A' is 6.255m Calculation: 6.255 x 5,000 = 31,275kg Rounded up: 31,280kg	The distance 'A' multiplied by 5,000* (see overleaf) rounded up to the next 10kg
at least 6.4m	32,000kg* (see overleaf)

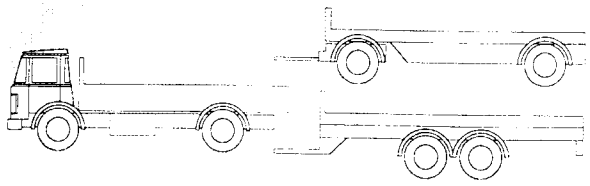
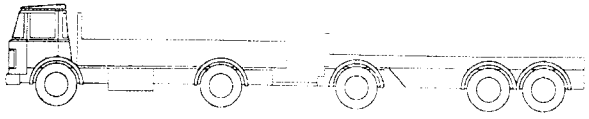
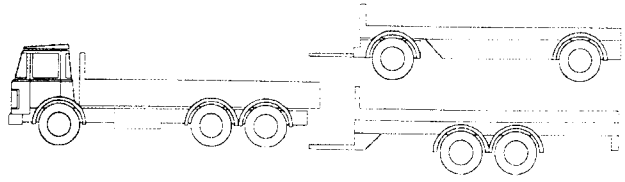
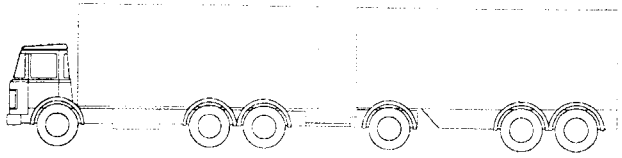
= Provided a plating certificate at this weight was in force before 1 January 1993.

* Only on a motor vehicle and provided:

1 every non-steering driving axle has twin tyres; and

2 either every driving axle has road friendly suspension or no closely spaced axle ('B') has an axle weight over 9,500kg.

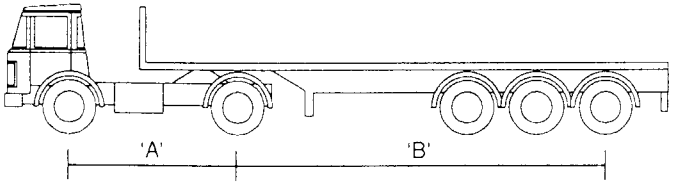
ROAD TRAIN WEIGHTS

Vehicle configuration	Maximum train weight
	32,520kg 35,000kg*
	32,520kg 38,000kg*
	32,520kg 38,000kg*
	32,520kg 38,000kg* 44,000kg*†

* When drive axle/s is fitted with twin tyres and road friendly suspension – or no axle on the drawing vehicle weighs more than 8,500kg.

† When the vehicle is used on a 'combined transport' operation.

ARTICULATED VEHICLES – 2 AXLED TRACTIVE UNIT



Distance 'A'	Tractor gvw	Distance 'B'	Outfit gtw
at least 2.0m	14,230kg	at least 2.0m	20,330kg
at least 2.4m	16,260kg	at least 2.2m	22,360kg
at least 2.7m	17,000kg	at least 2.6m	23,370kg
		at least 2.9m	24,390kg
		at least 3.2m	25,410kg
		at least 3.5m	26,420kg
		at least 3.8m	27,440kg
		at least 4.1m	28,450kg
		at least 4.4m	29,470kg
		at least 4.7m	30,490kg
		at least 5.0m	31,500kg
		at least 5.3m	32,520kg
		at least 5.5m	33,000kg*†
		at least 5.8m	34,000kg*†
		at least 6.2m	35,000kg*†
		at least 6.5m	36,000kg*
		at least 6.7m	37,000kg*
		at least 6.9m	38,000kg*

ARTICULATED VEHICLES – 2 AXLED TRACTIVE UNIT

Notes

1 Weights above 26,000kg only allowed with four or more axled combinations.

2 Weights above 35,000kg only allowed with five or more axled combinations.

3 Weights above 25,000kg on three-axled combinations and above 32,520kg on four-axled combinations(†) are only allowed where:

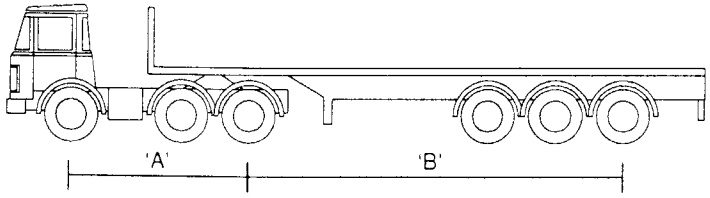
- a the tractive unit was first used on or after 1 April 1973;
- b every non-steering driving axle has twin tyres;
- c every driving axle has road friendly suspension.

4 A four axled artic is exempt from the road friendly requirements if it is on an international journey.

* For five or more axled outfits the tractive unit must have been first used on or after 1 April 1973.

Tacis

ARTICULATED VEHICLES – 3 AXLED TRACTIVE UNIT



Distance 'A'	Tractor gvw	Distance 'B'	Outfit gtw
at least 3.0m	20,330kg	at least 2.0m	20,330kg
	(MIAW 8,390kg)	at least 2.2m	22,360kg
at least 3.8m	22,360kg	at least 2.6m	23,370kg
	(MIAW 8,640kg)	at least 2.9m	24,390kg
at least 4.0m	22,500kg	at least 3.2m	25,410kg
	(MIAW 10,500kg)	at least 3.5m	26,420kg
at least 4.3m	24,390kg	at least 3.8m	27,440kg
	(MIAW 9,150kg)	at least 4.1m	28,450kg
at least 4.9m	24,390kg	at least 4.4m	29,470kg
	(MIAW 10,500kg)	at least 4.7m	30,490kg
		at least 5.0m	31,500kg
		at least 5.3m	32,520kg
		at least 5.4m	33,000kg†
		at least 5.6m	34,000kg†
		at least 5.8m	35,000kg†
		at least 6.0m	36,000kg
		at least 6.2m	37,000kg
		at least 6.3m	38,000kg
		at least 6.7m	39,000kg*
		at least 7.1m	40,000kg*
		at least 7.4m	41,000kg*
		at least 7.6m	42,000kg*
		at least 7.8m	43,000kg*
		at least 8.0m	44,000kg*

ARTICULATED VEHICLES – 3 AXLED TRACTIVE UNIT

Notes

1 Weights above 32,520kg are only allowed when the tractive unit was first used on or after 1 April 1973.

2 Weights above 35,000kg are only allowed with five or more axled outfits.

† Only allowed on a four-axled articulated vehicle when:

- a it is on an international journey; or
- b every non-steering driving axle has twin tyres; and
- c every driving axle has road friendly suspension.

* Weights above 38,000kg are only possible with six or more axled outfits when:

- a the vehicle is on a 'combined transport' operation;
- b every non-steering driving axle has twin tyres; and
- c every driving axle has road friendly suspension or no axle on the tractive unit weighs more than 8,500kg.

Tacis

OVERALL LENGTH

Length	Maximum permitted
Rigid vehicles	12m
Articulated vehicles	*16.5m
Articulated vehicles with low loader semi-trailer manufactured on or after 1 April 1991 (excluding step-frame low loaders)	18m
Car transporter semi-trailer:	
kingpin to rear	12.5m
kingpin to any point on the front	4.19m
Other semi-trailers:	
kingpin to rear	•12m
kingpin to any point on the front	•2.04m
Composite trailer	14.04m
Drawbar trailers (excluding length of drawbar) provided:	
1 trailer has four or more wheels 2 drawing vehicle has maximum gross weight over 3,500kg	*12m
Other drawbar trailers (excluding length of drawbar)	7m
Road-trains: one trailer (see note opposite)	18m
two trailers	†25.9m

* No set limit if designed to carry indivisible loads of exceptional length.

† Vehicle drawing more than one trailer limited to 9.2m in length.

• These dimensions include thickness of any front or rear wall, if more than one kingpin position measurement is taken from rearmost.

OVERALL LENGTH (CONTD)

Note

Construction and use regulations allow road-trains with a maximum length of 18.35m*. However, vehicles operating at this length must meet two additional dimensional criteria:

- the distance from the foremost point of the loading area behind the cab to the rear of the trailer must not exceed 16m; and
- the above measurement less the distance between the vehicle and trailer must not exceed 15.65m. (This gives a maximum load-carrying space.) This requirement does not apply to road-trains which are car transporters, nor to road-trains not over 18m overall length.

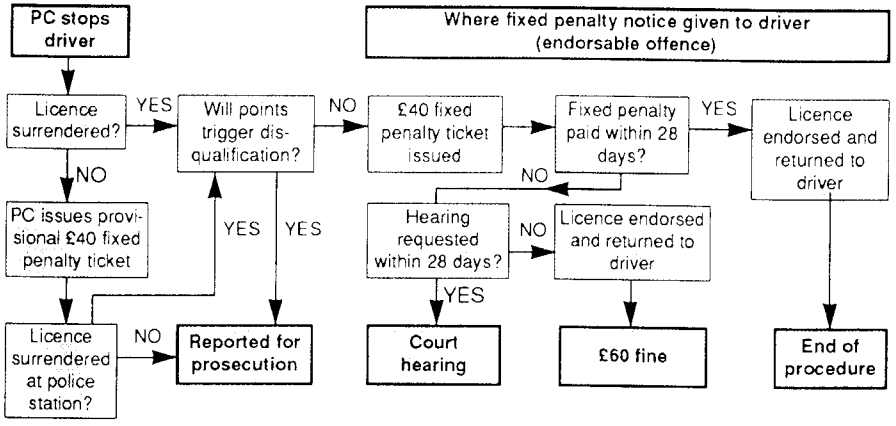
* The European Council of Ministers has agreed an increase in the length of roadtrains to 18.75m. At the time of going to press, however, no firm commitment had been made to produce legislation that would introduce this change.

MAXIMUM PERMITTED WIDTH

Maximum permitted width	
Motor cars	2.5m
Heavy motor cars	2.5m*
Trailers – provided:	2.5m*
1 every wheel has a pneumatic tyre 2 the drawing vehicle has maximum gross weight over 3,500kg 3 every wheel of the towing vehicle (other than a locomotive) has a pneumatic tyre	
Other trailers	2.3m
Vehicles constructed to carry goods at reduced temperatures with a body side wall thickness of at least 45mm	2.6m
Motor tractors	2.5m*
Locomotives	2.75m

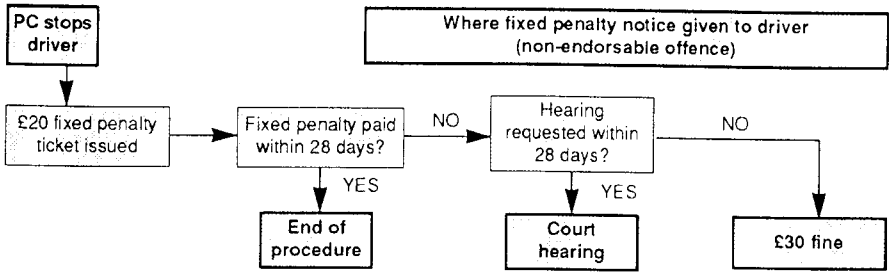
ENFORCEMENT

Typical fixed penalty procedures



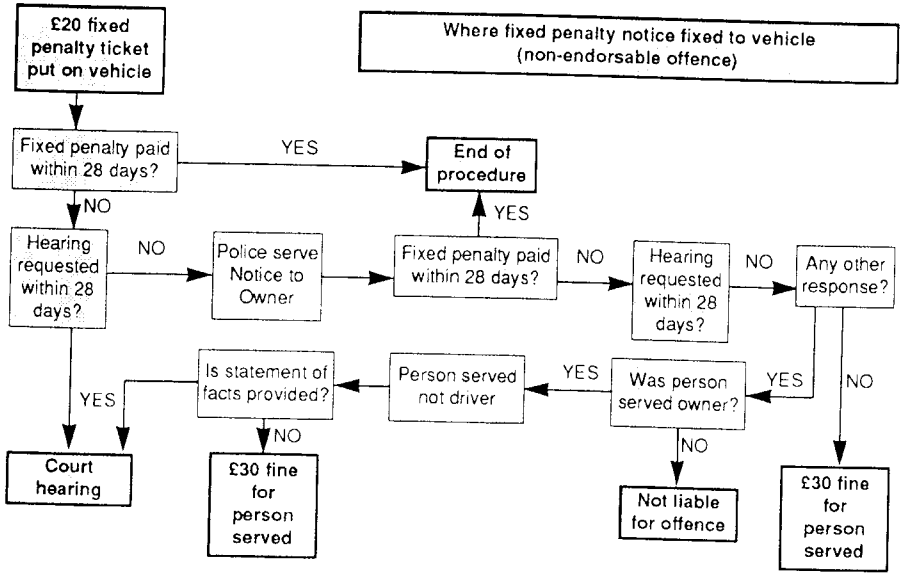
ENFORCEMENT

Typical fixed penalty procedures



ENFORCEMENT

Typical fixed penalty procedures



1 The procedure for an excess parking charge is similar to a fixed penalty except that payment must be made within seven days. Continuous liability for an unpaid excess parking charge does not apply.

2 A Notice to Owner must be served within six months of the penalty ticket.

3 Prosecution for a fixed penalty offence can lead to a fine of at least double the fixed penalty.

INTERNATIONAL INSTITUTIONS

1 UNITED NATIONS

2 ECONOMIC COMMISSION FOR EUROPE

3 INLAND TRANSPORT COMMITTEE

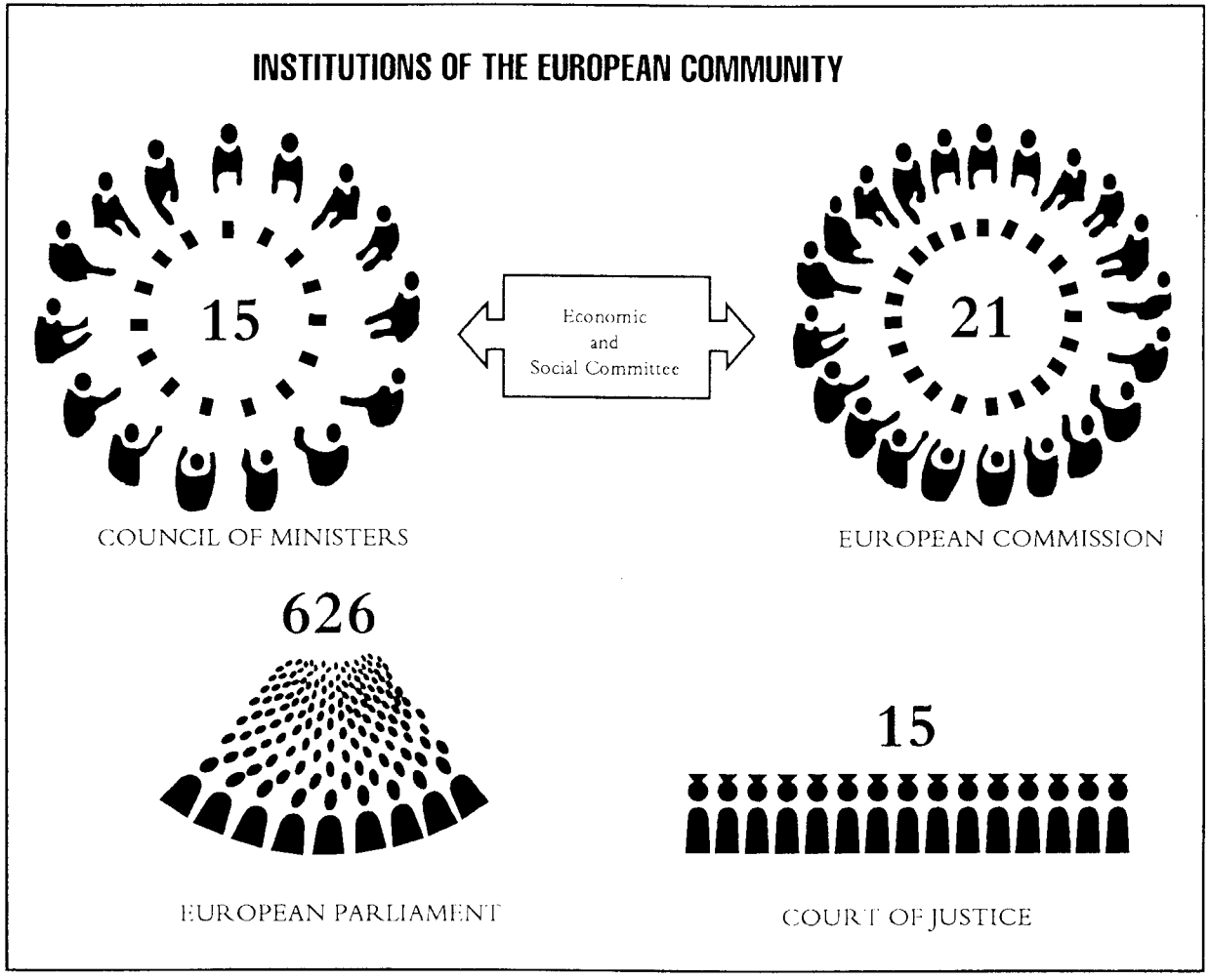
4 EUROPEAN AGREEMENT ON MAIN INTERNATIONAL TRAFFIC ARTERIES

5 EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT

6 THE EUROPEAN UNION

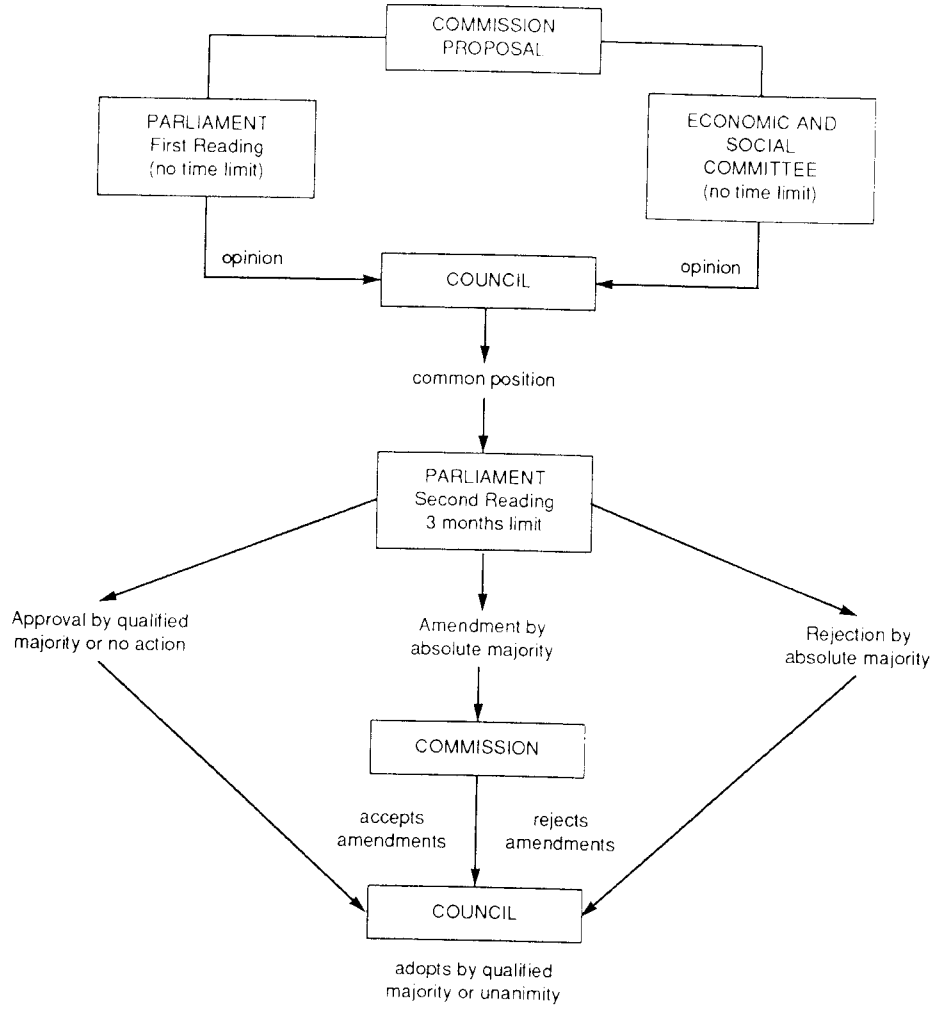
Tacis

INTERNATIONAL INSTITUTIONS



Tacis

CO-OPERATION PROCEDURE



THE COMMON TRANSPORT POLICY

- APPLICATION OF EU LEGISLATION
- COMMON TRANSPORT POLICY
- COMMUNITY AUTHORISATION
- SCHENGEN AGREEMENT
- WEIGHTS AND DIMENSIONS
- VEHICLE TESTING
- MARKET CONTROL
- EUROPEAN ECONOMIC AREA
- COMMITTEE OF THE REGIONS

Tacis

DRIVER LICENSING

Category	Description of vehicles in the category	Old group(s)/ class(es)
A	Motor bicycle (with or without sidecar) but excluding any vehicle in category K or P	D
B	Motor vehicle with maximum authorised mass not exceeding 3.5 tonnes and not more than eight seats in addition to the driver's seat, not included in any other category and including such a vehicle drawing a trailer with maximum authorised mass not exceeding 750kg	A
B1	Motor tricycle with maximum design speed exceeding 50km/h and engine capacity greater than 50cc but excluding any vehicle in category K, L or P	C and J
C	Motor vehicle used for the carriage of goods with permissible maximum weight exceeding 3.5 tonnes including such a vehicle drawing a trailer with maximum authorised mass not exceeding 5 tonnes in the case of a single axle trailer or 750kg for any other	hgv 2 or 3

Tacis

DRIVER LICENSING

Category	Description of vehicles in the category	Old group(s)/ class(es)
C1	Motor vehicle used for the carriage of goods with maximum authorised mass exceeding 3.5 tonnes but not exceeding 7.5 tonnes and including such a vehicle drawing a trailer with maximum authorised mass not exceeding 750kg	A
D	Motor vehicle used for the carriage of passengers with more than eight seats in addition to the driver's seat	psv 1, 2 or 3
D1	Motor vehicle used for the carriage of passengers (but not for hire or reward) with more than eight seats, but not more than 16 seats, in addition to the driver's seat and including such a vehicle drawing a trailer with maximum authorised mass not exceeding 750kg	A
B plus E	Combination of a motor vehicle in category B and a trailer with maximum authorised mass exceeding 750kg	A
C plus E	Combination of a motor vehicle in category C and a trailer with maximum authorised mass exceeding 750kg	hgv 1

Tacis

DRIVER LICENSING

Category	Description of vehicles in the category	Old group(s)/ class(es)
C1 plus E	Combination of a motor vehicle in category C1 and a trailer with maximum authorised mass exceeding 750kg where the maximum authorised mass of the combination does not exceed 8.25 tonnes	A
D plus E	Combination of a motor vehicle in category D and a trailer with maximum authorised mass exceeding 750kg	psv 1 or 2
D1 plus E	Combination of a motor vehicle in category D1 and a trailer with maximum authorised mass exceeding 750kg	A
F	Agricultural tractor, but excluding any vehicle in category H	F
G	Road roller	G
H	Track-laying vehicle steered by its tracks	H
K	Mowing machine or pedestrian-controlled vehicle	K
L	Vehicle propelled by electrical power but excluding any vehicle in category A, K or P	L
N	Vehicles covered by the former 'six miles a week' or new 'limited use' VED categories	N
P	Moped	E

DRIVER LICENSING

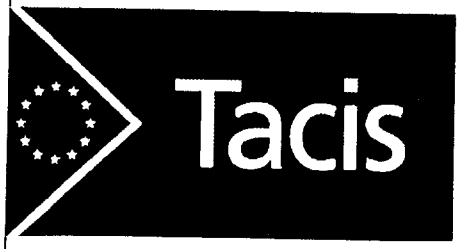
- APPLICATION
- RENEWAL
- ADDITIONAL REQUIREMENTS
- COST AND DURATION
- MEDICAL REPORTS
- SUSPENSION AND REVOCATION

OPERATOR LICENSING

- RESTRICTED
- STANDARD
- INTERNATIONAL

OPERATOR LICENSING

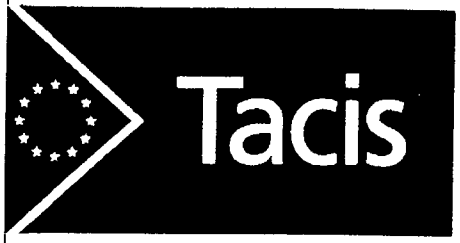
- VEHICLES AFFECTED
- EXEMPTIONS



OPERATOR LICENSING

CRITERIA FOR OBTAINING LICENCES

- GENERAL FITNESS
- VEHICLE MAINTENANCE
- DRIVERS HOURS/OVERLOADING
- SUITABILITY OF OPERATING CENTRE
- FINANCIAL RESOURCES
- PROFESSIONAL COMPETENCE



THE TIR CONVENTION

- ISSUING ASSOCIATIONS
- THE CARNET
- GUARANTEES
- CLAIMS
- APPROVALS
- TIR PLATES

CONDITIONS OF CARRIAGE AND INSURANCE

- CMR CONVENTION
- CONTRACTING COUNTRIES
- CARRIER LIABILITIES
- COMPENSATION

VEHICLE TESTING

- TYPES OF TEST
- PLATING
- SPECIAL TYPES
- EXEMPTIONS
- ROADWORTHINESS ENFORCEMENT AND PROHIBITIONS

Tacis

CONSTRUCTION & USE OF VEHICLES

- BRAKES
- MARKINGS
- MIRRORS
- OVERHANG
- REAR UNDER-RUN PROTECTION
- SAFETY GLASS
- SIDEGUARDS
- SPEEDOMETERS
- SPEED LIMITERS
- TYRES
- LIGHTING

Tacis

SIR ALEXANDER GIBB & PARTNERS LTD

Transport Business Manual

Tacis

Traceca - Improvement of Road Services Central Asia

SIR ALEXANDER GIBB & PARTNERS LTD

Transport Business Manual

REGISTERED OFFICE :
EARLEY HOUSE, LONDON ROAD,
READING, BERKSHIRE RG6 1BL.
REGISTERED IN ENGLAND AND WALES
NO 2387707
Phone +44 (0)1734 635000 FAX +44 (0)1734 635100

Tacis

Table of Contents

Table of Forms

Tacis

1

1. Introduction

The aims of this manual and the workshop sessions that accompany it are:

- *to identify the key business areas which are common to all businesses;*
- *to instil a culture of plan/act/monitor for each business;*
- *to provide a sound commercial basis for each of the business pilots carried out within the overall project.*

1.1 Key Business Areas

This business Manual covers three functions which are central to every business regardless of its specialisation and its geographical location : Marketing, Operations and Accounting/Budgeting.

1.1.1 Marketing

For transportation businesses, Marketing is the process of understanding the demand for transport services, how it is changing and how best to service that demand.

1.1.2 Operations

For transportation businesses, Operations covers all the aspects of providing the transport services to the customer including : vehicle provision, maintenance, scheduling, storage and delivery.

This section will also cover a detailed understanding of operational costing and pricing.

1.1.3 Accounting/Budgeting

All businesses require regular information about how they are performing. This section covers both management and financial accounting and includes a detailed examination of budgeting which allows performance to be monitored at regular intervals.

All three of these areas have a high degree of interaction. No transportation business can exist without a market for its services. As more information becomes available about a changing market then the portfolio of services operated has to change to more adequately serve that market.

Every business needs a supply of finance. Banking institutions will not make money available to invest in your business unless they can see that it will earn them a satisfactory return. To satisfy them they will need to see a plan showing how your services will be sold and operated and how much profit will be made for a number of years.

> Once you have money available, you and your management will need to decide what is the best use for that money within your business - for example, should you invest in a new service?

1.2 Plan/act/monitor

For any business to be successful, it has to prepare a plan for the development of the business, carry out a series of actions dictated by that plan and then monitor the effect of those actions and change actions accordingly.

There are two important concepts here:

1. flexibility and
2. minimisation of uncertainty

In a command economy such as those in the Republics under the Soviet system, the economy was highly planned from the centre and actions taken according to those 5 year plans. This was however only part of the necessary system because the actions were not monitored so the plans were not flexible.

In a market economy, such a lack of monitoring and flexibility would result in the organisation going out of business.

1.3 The Business Pilots

The business pilots included in the Traceca project are designed to transfer western business approaches and skills to transportation businesses in Central Asia.

Each of the three business pilots will:

- ✓ use the approach outlined in this Business Manual;
- ✓ use the techniques detailed in this Business Manual and demonstrated in the Workshops;
- ✓ produce a detailed Business Plan for the pilot in co-operation with the Consultants and the European counterparts;
- ✓ produce management accounts which will enable both budgeting and monitoring of performance;
- ✓ monitor the performance of the pilot at the end of the fist quarter of operation;

Experience gained from each individual pilot will be shared with all delegates on both the UK study tour and the State Seminars.

2

2. Marketing

2.1 Introduction to the module

When you have completed this module, you will be able to:

- *understand how marketing fits into your business;*
- *carry out market research into your markets and competitors;*
- *examine existing products (services) and decide how to develop them;*
- *identify key marketing objectives and strategies to achieve them;*
- *compile a marketing plan for inclusion in the overall business plan.*

2.2 Introduction to Marketing

DEFINITION OF MARKETING

Marketing is the mix of activities within a business that identify customers and their demand and direct the products (services) towards them

Understanding your marketplace is vital if your company is to prosper or even survive - without a market you do not have a business.

The pattern that this module follows is :

- ✓ **Market research** — the markets for your services
  competitors in the market
- ✓ **SWOT analysis** — of your company and your competitors
- ✓ **Marketing mix** — services offered
  price
  promotion
  customer relations
- ✓ **Marketing plan** — marketing objectives and action plan.

2.3 Market Research

The purpose of market research is to :

- ✓ know your services;
- ✓ know your customers, their needs, their buying habits and how they are changing;
- ✓ know who your competitors are and what services they are offering.

In short, the purpose of market research is to identify and understand your market(s).

2.3.1 Services Audit

The start point for market research is an audit of current services. In the case of a transport company these may include: unit-load transportation, multi-drop distribution, collection, warehousing and forwarding.

> **Useful Tip**
>
> Product-led versus Market-led
>
> Western economies are littered with companies that have gone out of business because they are product (or service) led rather than market led. It is very tempting to say ' I am a trucker, I have a number of trucks, somebody will want to use them'.
>
> It is much better to say 'the brewing industry in Oblast X has a requirement to collect 500,000 cases of beer per year, store them and distribute them to 300 outlets. My company will provide that service'.

Having established the list of services offered they should then be prioritised in terms of importance to the company.

2.3.2 Market Segmentation

Marketing is about the matching of your current services portfolio or one which you are able to deliver to the needs of your market. You will find it much easier to understand and analyse information if you identify and break down the various markets in which you operate. This process is referred to as **market segmentation.**

There are two main types of market segmentation:

1. by geographic area and
2. by customer type (industry)

The reason for market segmentation is that a small company does not have the resources (or the finance) to offer all possible transport-related services to all types of customers in all geographic areas.

There are three rules governing the selection of market segments:

1. The segment must be large enough to provide businesses with an adequate financial return on investment.
2. The customers within a segment must be located close enough or similar enough to be treated as a single group.

3. You must be able to easily reach the market, otherwise, potential customers will not be aware of your services.

Useful Tip

Niche Marketing

It is often tempting to offer as many services as possible over as wide a geographic area as possible in the hope that it will result in more business. This is not necessarily the case.

In western economies, many businesses prosper on niche marketing - that is, serving the needs of a relatively small number of specialist customers. This allows the company to concentrate resources and management in to a very specialised area and to differentiate the skilled service from those services offered by general providers.

Examples of such specialisation in the west are companies specialising in the transportation of computers, powders and even scenery for theatres. Each of these companies has concentrated their investment on equipment specifically to carry out this work.

Form 2-1 Market Segmentation

Service :				
Segment Number	Industrial Sector	Geographical Area	Number of Potential Customers	Segment Size

Form 2-2 Customer Analysis

Market segment :				
Customer Name	Location(s)	Size of Business	Special needs	Current Provider

When looking at market segments for your services you should consider:

- ✓ the geographic location of the market and its distance from your current base;
- ✓ the total number of customers in that segment;
- ✓ the size profile of the customers in the segment (if available).

Form 2.1 can be used to note down the segments of potential interest for your services. Note that there may be different segments for each of your services or you may want to offer more than one service to each segment.

For each market segment that looks attractive you should then identify, initially, the top 20 customers in the sector and list the following for each:

- ✓ name of organisation;
- ✓ location of main office and branches;
- ✓ size in terms of approximate number of loads generated per year;
- ✓ any special requirements (for example, seasonal warehousing or collection of raw materials);
- ✓ current arrangements (either carrying out their own transportation or using a competitor of yours - if a competitor, note who!).

Form 2.2 can be used for each segment to note down characteristics of the most important customers.

2.3.3 Competition

One of the biggest differences between a command economy under the old Soviet system and a market economy is the presence of competition between alternative suppliers of goods or services.

In practical terms, you will be trying to persuade customers to spend their money with you rather than with your competitors. Customers will be looking to satisfy their needs by using a particular transport service. Both you and your competitors will be able to supply that service, perhaps to varying degrees.

Having identified the customer, in order to beat your competition and win the business you need to know:

- ✓ who your competitors are;
- ✓ where they are located;
- ✓ what products and services they offer;
- ✓ who their major customers are;
- ✓ if possible, their pricing policies.

Use Form 2.3 to list the main competitors in each of the market segments in which you operate. Remember that in some cases, the customer himself may be a competitor as he may be transporting his own goods - something which you as a transport specialist may be able to do more effectively/cheaply than he can.

SUMMARY

This section of the module has allowed you to analyse the overall markets to establish which segments are likely to be the most suitable for your range of services.

Having established, the market segments and the potential customers within each the module has identified the main competitors that are present in each segment.

These examinations may have revealed that you need to modify your portfolio of services in the light of what the markets require. This modification process has to occur often if you are to behave as a market-led business.

Form 2-3 Competitor Analysis

Market Segment :				
Competitor Name	Location(s)	Services Offered	Major Customers	Prices Achieved

2.4 SWOT Analysis

The information gathered in section 2.3 has concentrated on two aspects of your business - the market and your competitors. This section allows you to determine how your business may perform in those market segments.

A technique often used in marketing for western businesses is the SWOT analysis. This analyses the **strengths** and **weaknesses** of your business as it stands and the **opportunities** and **threats** that apply to the business. Examples of all of these are given below.

Strengths	*Weaknesses*
Reputation	Inflexible management structure
Good equipment	No experience in the segment
Some well-known customers	No national coverage
Opportunities	*Threats*
Increasing privatisation	Increasing competition
Other industries concentrating on core businesses	Increasing operating costs
Differentiation through regulation	Being unable to meet new standards

Use Form 2.4 to note down the strengths, weaknesses, opportunities and threats for your business. When you have completed this for your business do the same for your more important competitors.

Useful Tip

Strengths and weaknesses apply to your business itself. They are issues which you as the manager of that business can control and change.

Opportunities and threats are things which apply from outside of your business and are things which you cannot directly control.

The same thing can be both a strength and a weakness. For instance, a strength may be that your business has national coverage with a transport depot in each Oblast. The corresponding weakness may be that this makes the business difficult to manage.

The same thing applies to opportunities and threats. General privatisation is an opportunity which will open up many market segments to the transport entrepreneur. However it is also a threat in that it will make it easier for other competitors to set up.

Form 2-4 SWOT Analysis - Your Business

Strengths	*Weaknesses*
Opportunities	*Threats*
.	.
.	.
.	.

SUMMARY

This section of the module has allowed you to identify the particular characteristics of your business and its marketplace and will allow you to exploit them by developing a marketing strategy which will exploit your strengths and opportunities and defend against your weaknesses and threats.

2.5 Marketing Mix

There are three elements to the marketing mix for your business:

- ✓ the features of the services you are offering;
- ✓ the price you are demanding for those services;
- ✓ the methods used to promote those services.

There is often a fourth element identified, the place at which a product is offered. However, because we in transport are offering a service then the place in which that service is offered is considered as part of market segmentation in 2.2 above.

2.5.1 Services offered

This section examines the services offered by your company and looks at their characteristics prior to making decisions regarding the pricing of those services.

Things that you have to consider in this section for each service offered are:

2.5.1.1 SERVICE FEATURES

How closely does the services offered match the important parts of the customer's need sets.

2.5.1.2 DIFFERENTIATION

How is your service different from that offered by your competitors and is that difference something that features high on a customers needs list.

2.5.1.3 CUSTOMER SERVICE

Can each service be improved in terms of quality of delivery. Is quality/reliability an important item on thecustomer's needs list?

Useful Tip

Customer care and quality of service

Every customer must feel that he is getting value for money from the company that provides his transport service. This value has two elements:

the price paid;

the quality of service offered.

The greater the competition in a market segment, the lower the market price will be as competing firms under-cut prices offered. In certain circumstances, a basic service at the lowest possible price will constitute value for money. An example of this may be the transportation of great volumes of coal between a mine and a power station.

However, in many cases, as competition drives the prices down in a market, companies wishing to maintain their profit margins reduce their costs by cutting back on essential expenditure. This may involve not servicing the vehicles frequently enough, expecting drivers to work shifts that are too long, not employing enough men for loading and unloading or not packing goods properly before transporting.

Under these circumstances, vehicles can break down, delays occur and consignments can be damaged or go missing altogether. If any of these happen, there is no customer satisfaction because, although he is getting a low price, he is not getting value for money because his goods are either late arriving, are damaged or have disappeared!

In other words, what the customer wants as value for money is

RELIABILITY AT A REASONABLE PRICE.

In western economies, customers are demanding extremely high levels of customer service as a basic requirement. It is not uncommon to have to guarantee to make all deliveries, 100% accurate within 15 minutes of an agreed delivery time. Often the customer will only pay the full bill if those criteria are met.

These western customers are starting to distribute their products in Central Asia, to countries a long way from their existing operations so reliability of service is paramount.

If you are unable to differentiate your service from that of your competitors in terms of reliability and guaranteed high operating standards you will not gain any sustainable business from European customers.

2.5.1.4 UNIQUE OFFERING

Are any characteristics of the service unique to your company, that is, not offered by any of your competitors? Are they considered important by the customer in his buying decision?

2.5.2 Pricing of the Services

There are four stages involved in pricing a service :

1. estimating the value of the service to the customer
2. setting the price
3. checking the profitability
4. convincing the customer

2.5.2.1 ESTIMATING THE VALUE

You need to estimate the value of your service from the customers standpoint because it is that which will determine the price he is willing to pay. The analysis carried out above will be helpful in this.

Things which will determine the value placed by the customer on your service include:

- ✓ the urgency of his need to transport the goods (the shorter the time from collection to delivery the higher the price he will pay);
- ✓ the value of the shipment to him;
- ✓ the quality of service offered, if extra or guaranteed service is required;
- ✓ whether he can get the same service elsewhere.

2.5.2.2 SETTING THE PRICE

Having estimated the value of your service to the customer the price has to be set. This is inevitably a matter of judgement and may need to set at such an initial level to allow yourself room to be negotiated downwards.

Useful Tip

Do not confuse pricing with costing ! Costing is a matter of fact, pricing is a matter of judgement about the market you are in at any particular time.

2.5.2.3 CHECKING THE PROFITABILITY

Having set a price but before telling the customer, you need to check on the profitability of offering the service at that price. Section 3 of the business manual covers operational costing so this will enable you to build a detailed and accurate picture of the cost of providing each service. You will also know the minimum levels of profit for you to continue as a profitable business.

These can be added and compared to the price that has been set. If the margins are exceeded and the customer is willing to pay the price then all is okay. It is often the case that the customer is not willing to pay the price needed to make a profit, particularly if the market is a competitive one or the service is no different to that provided by the competitors.

Decisions taken at this stage are a matter of policy. It is sometimes reasonable to accept business which is unprofitable if it will lead to other more profitable business or if it makes use of resources which would otherwise be idle or if the customer will provide work at another time of the year which is sufficiently profitable to compensate for the unprofitable period.

2.5.2.4 CONVINCING THE CUSTOMER

Convincing the customer will be much easier if his needs set have been correctly identified in the first place and each shown to have been specifically addressed in your proposal.

The price is likely to be negotiated downwards so it is important to use the above section to identify the lowest price, below which you are unwilling to offer that service.

Convincing the customer is sometimes helped by a good promotional package which is covered in the next section.

2.5.3 Promoting the Service

Promotion constitutes the various activities a business undertakes to communicate the merits of the services it offers and to persuade target customers to purchase its services.

Four major tools are used:

1. advertising
2. sales promotion
3. public relations
4. personal selling

A brief definition of each of these is:

2.5.3.1 ADVERTISING

Any paid form of non-personal presentation of your services by an identified sponsor.

2.5.3.2 SALES PROMOTION

Short term incentives to encourage both current and prospective customers to purchase your services.

2.5.3.3 PUBLIC RELATIONS

A variety of programmes designed to improve, maintain, or protect a company or brand image.

2.5.3.4 PERSONAL SELLING

Person-to person involvement where you assist and persuade the potential customer to purchase your services.

Promotion is a cost to your business and the success of specific promotional activities is difficult to prove and justify. It is recommended that you establish some standard by which you measure how much your promotional effort is worth in terms of new business; otherwise your money may be wasted.

Useful Tip

Customer Relations

Promotional activity is an expensive method of gaining new business and its success is difficult to predict. As the provider of a transport service, the most lucrative sources of new business are your current customers so maintaining good relationships with them is critically important.

- Good relations can be built and maintained by:
- giving customers the service they want **consistently**;
- deciding on profit margins that give a good return to you but also give the customer perceived **value for money**;
- continually **reviewing the customer's needs** and developing your service through innovation and improvement;
- regular sales calls, contacts and entertainment relevant to the sales potential.

Summary

This section of the module has allowed you to determine the marketing mix for your services having determined in previous modules, the market segments in which you wish to offer the services.

Determining the marketing mix has enabled you to evaluate your portfolio of services, how you will make their existence known to potential customers and what prices you will charge for those services.

2.6 The Marketing Plan

There are three stages to developing the marketing plan:

1. setting the objectives
2. writing the action plan
3. setting a marketing budget

Each of these is now discussed:

2.6.1 Setting the objectives

Having carried out the detailed market research earlier in the module you now have a number of options for developing the business and the range of services. Setting out marketing objectives will:

- ✓ give clear direction and purpose to your effort;
- ✓ enable your colleagues in the business to see what is expected of them;
- ✓ improve your control over the marketing function;
- ✓ help improve the profitability of the business.

For the marketing objectives to be useful, they must be:

- ✓ measurable;
- ✓ bound by time;
- ✓ realistic and achievable;
- ✓ somebody's clear responsibility.

Some examples of marketing objectives follow:

Market Share	To increase market share of market segment X from 10% to 15% by December 1997.
Range of Services	To identify a new service and to develop it to account for 10% of revenue by March 1998.
Business Growth	To grow the business from an annual turnover of USD500,00 to USD1,500,000 by January 2001.
Development of new markets	To establish an operation in Oblasts X, Y and Z by August 1997.
Pricing	To establish enough differentiation for service A to command a premium of 10% above market price by June 1998.

Form 2.5 can be used to list the marketing objectives for your business.

2.6.2 Writing the Marketing action plan

So far in this module, you have carried out research into your market and analysed the findings. You may have already made some changes based on those findings, especially the services that you offer. Now is the time to translate the plan you have developed into a series of actions.

Take each marketing objective in turn and use form 2.6 to list a series of tasks which will achieve that objective. Each individual task should be given a start date and an end date.

Useful Tip

Setting objectives and action plans

If you are a 'one-man' business you will be involved in all aspects of the business, including marketing. If this is the case it is essential that you have a list of objectives and actions as a constant reminder of what needs to be done.

If you are a larger business you may have people who will specialise in the marketing of the business. If this is the case, the action plan and the objectives will be a useful method of directing and controlling their workload.

If possible, do not complete the objectives and action plan yourself and then hand it out to the people responsible. It is much more effective and motivational to include the people responsible in the process of establishing the objectives and action plan. They will then feel ownership of the targets that are set.

An example of an **Marketing Action Plan and Budget** is shown below:

OBJECTIVE: TO ESTABLISH AN OPERATION IN OBLAST X BY AUGUST 1997.				
Task	Start Date	End Date	By Whom	Task Done
Identify potential customers.in Oblast X	AUG96	SEP96	Mr M	
Survey customers to find needs	SEP96	NOV96	Mr M.	
Determine minimum demand levels for current services	DEC96	DEC96	Mr M.	
Determine size and scope of operation in Oblast X	JAN97	JAN97	Mr A	
Determine opening time for operation	JAN97	JAN97	Mr A.	
Compile prioritised list of prospective customers	JAN97	FEB97	Mr M.	
Prepare promotional material for services and opening	FEB97	MAR97	Mr M	
Run sales calls and presentations to customers	MAR97	JUN97	Mr M.	
Start operation	JUL97		Mr A.	

Form - Marketing Objectives

Objective	*By Whom*	*Budget*

Form 2-6 Marketing Action Plan and Budget

Objective					
Task	Start Date	End Date	By Whom	Budget	Task Done

2.6.3 Setting and allocating the Marketing budget

An important consideration in running any business is to focus the expenditure of time and money to produce the best results. Marketing costs both time and money so the budgeting process is important as a means of prioritising the activities.

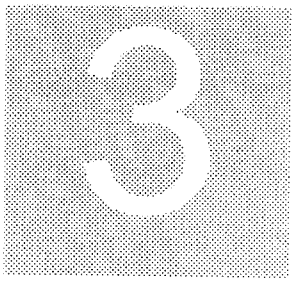
Allocate a budgeted cost (including the cost of time) to each task in the action plan. Summing these costs will give an overall projected marketing spend. If this is more than the business can afford to spend, the tasks in the action plan have to be prioritised according to the returns they will generate against the cost.

Summary

By following this module you will have produced a well-researched and considered plan for attacking your market.

Remember that you can offer the best transport service in the world but you are unlikely to see business success unless you have a strategy for promoting them in the right manner to the right people at the right time and at the right price.

Keep monitoring the action plan and do not hesitate to make changes if circumstances change or it is not working.



3. Operations

3.1 Introduction to the module

When you have completed this module, you will be able to:

- *understand all the processes involved in transportation as a support to the economy;*
- *appreciate the full range of services that are offered by operators in a western economy;*
- *carry out detailed analysis of your operational costs;*
- *investigate different options for pricing your services;*
- *understand the importance of regular vehicle maintenance programmes;*
- *examine different alternatives for making your assets work harder and more profitably.*

3.2 Introduction to operations

DEFINITION OF OPERATIONS

📖 Operations in a transport business is the mix of processes which enable that business to perform its services for the customer.

In order to successfully manage the operations of a transport business it is necessary to have a good understanding of the processes involved in delivering the whole range of possible freight transport services. These processes can often be combined in slightly different ways to produce new services.

For instance, the addition of a warehouse in a city location to a fleet of small vehicles will enable that business to offer a more profitable logistics operation rather than simply providing trucking.

This section of the module examines the following as a guide to the processes involved in transportation in a western economy:

- ✓ the role of transport
- ✓ organisations involved in the transport market
- ✓ types of transportation

3.2.1 The role of transport

An important concept when discussing the role of transport is the **Supply Chain**. The supply chain for a product is the stages that the product passes through from its production to its consumption. The supply chain for an essential product - bread - is shown below.

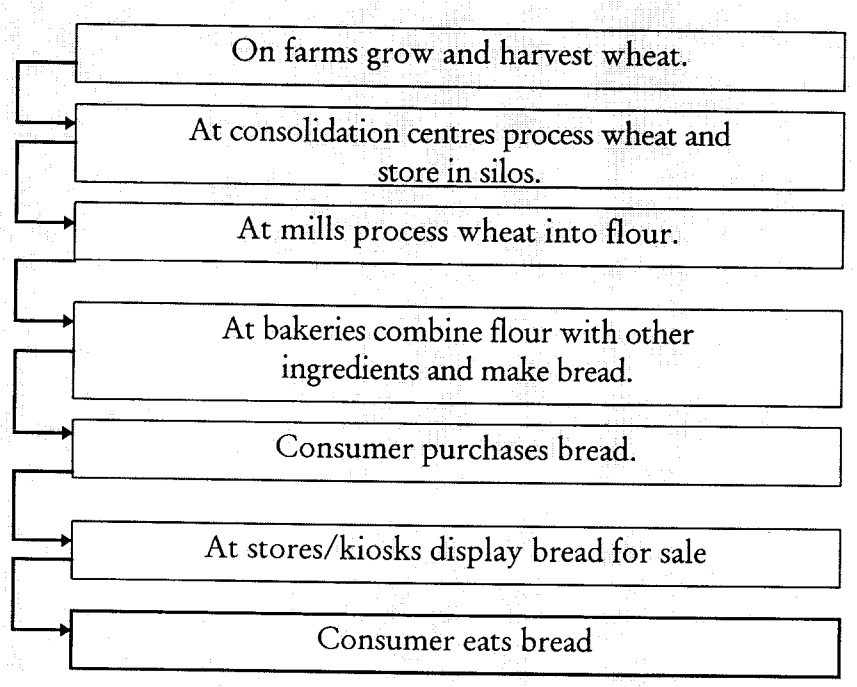
All products have similar supply chains and all involve the transportation of materials, partly finished or finished products between locations. This means that transportation is an essential part of any economy and a very large source of potential business for the transport operator. Select a few products that are consumed or produced in your local area and work out the supply chain for each, noting where each stage occurs and the type of vehicles needed.

The supply chains for some products and the locations for each stage are very local. For instance, vegetables purchased in a market will have been grown only a few kilometres away. Other supply chains are global with computer parts being manufactured in Japan, assembled in the UK and sold in Russia.

Example

The supply chain for bread

The stages which occur before a consumer eats a loaf of bread are:



.In most cases each of these 7 stages occur in different locations so between every stage **there is a need for transportation** The only exception to this is between f and g if the consumer eats the bread at the store when he buys it.

In the supply chain example above there are at least 4 different types of transport involved - tractors, large open bulk carriers for the processed wheat, large trucks for moving the flour to the bakeries and small trucks for delivering bread to the stores/kiosks. **Every one of these is an opportunity for the transport operator.**

3.2.2 Organisations involved in the transport market

There are five main players in a transport market:

- ✓ Shippers
- ✓ Freight Forwarders
- ✓ Hauliers
- ✓ Distributors
- ✓ Logistics providers

3.2.2.1 SHIPPERS

The shipper of a consignment is the organisation on whose behalf the goods are being moved. Often, the shipper is the producer of goods and the transportation service is being used to get his goods to his market. Sometimes however, the shipper may be the person who is selling the goods to the consumer (the retailer). At other points in the supply chain, it may be the manufacturer shipping materials into his factory.

Useful Tip

The shipper's buying decision

When purchasing transport services, shippers will often make their buying decisions according to price because as a cost to them, the lower the price they pay for transport, the more profit they make. This is particularly the case for relatively simple and low-risk local work or high volume bulk transportation between two points (coal from the mine to the power station).

However, increasingly, shippers are buying according to quality of service and reliability as well as price. This is particularly the case for European shippers transporting their goods to Central Asia. In this case, their supply chain is a very long one with ultimate delivery being made thousands of miles away from their home base.

This is made more important by the fact that initially they are not selling enough of their products to justify a full operation in Central Asia so they cannot check on the performance of their transport contractor as they could in their own country.

This means that there is a major opportunity for you to secure this business at good rates by providing a consistently high quality and reliable service.

3.2.2.2 FREIGHT FORWARDERS

Forwarders are agents who often work on behalf of the shipper to expedite his consignment. The forwarders role, particularly for international shipments includes :

- ✓ selection of transport operators
- ✓ selection of shipping lines
- ✓ administration of the shipment
- ✓ consolidation of shipments into economic loads
- ✓ provision of warehousing

The forwarder is in a similar position to the shipper. He is responsible to the shipper for the transportation and delivery of the consignment so he is buying reliability and reputation from you.

3.2.2.3 HAULIERS

Hauliers range in size from a one man operator with one truck up to major European enterprises such as Hungarocamion with many thousands of trucks. These operators specialise just in transporting loads from A to B. The greater the distance over which a load is transported, the more important it is that the truck is full.

Competition in the haulage market is very fierce because there are many operators and the task of moving goods from A to B is very simple without much value added. It is therefore important for hauliers to gain their advantage through efficient scheduling of the trucks and carefully managed maintenance programmes. These are discussed in sections 3.5 and 3.6 below.

3.2.2.4 DISTRIBUTORS

Hauliers are in business to collect, where possible, a full load from point A, move it to point B ands deliver the whole load to that single location. Distributors are in business to collect a full load from point A and then deliver a part of that load to each of a number of locations.

In the bread supply chain example shown above, the transportation of wheat to the mill from the silo would be carried out as a single load by the haulier. The transportation of flour from the mill to the bakeries would be carried out by a distributor with as little as one sack of flour being delivered to each of many bakeries.

The potential for adding value in distribution is much greater than it is in haulage. For instance, a service can be offered to warehouse the flour and process the individual orders from each bakery each day and make the deliveries.

3.2.2.5 LOGISTICS PROVIDERS

The opportunity to add value at the distribution stage has led, in European economies to the creation of operators who provide all the transportation involved in a supply chain.

For instance, if a transport operator works for a bakery, distributing the bread each day to stores and kiosks, it may be possible for the vehicle to collect the next day's flour requirement from the mill on the way back to the bakery instead of returning empty. In this way the overall supply chain is run more efficiently.

Such an approach would differentiate your services from those offered by your competitors who concentrate on the relatively less attractive haulage service. In Europe, such services provided by logistics companies include order collection and processing, stock control and ownership and even production planning.

3.2.3 Types of transportation

There are three types of freight transportation:

- ✓ Haulage
- ✓ Primary Distribution
- ✓ Secondary Distribution

3.2.3.1 HAULAGE

As described above, haulage is the simple movement of full loads between two points and is dependent on its profitability on low costs, efficient scheduling and the ability to secure return loads to minimise empty running.

3.2.3.2 PRIMARY DISTRIBUTION

This service also involves the delivery of full loads from A to B but in this case, A is the production point and B is a warehouse from which local distribution is carried out.

In the example above, the mill may cover a large area and have a number of regional warehouses from which local distribution is carried out. The movement of full loads of flour from the mill to the local warehouses is termed primary distribution.

3.2.3.3 SECONDARY DISTRIBUTION

The local distribution of flour from the regional warehouse to bakeries within the area is termed secondary distribution. It is often the case that both primary and secondary distribution is carried out by the same transport operator.

The mill gets a more cost effective service by having both primary and secondary distribution carried out on the most suitable vehicles rather than a large vehicle delivering perhaps one sack of flour to each bakery.

The transport operator can then start to add value by managing (and even owning) the warehouse, order processing and stock control.

Useful Tip

Dedicated versus Common-user Distribution

On a dedicated distribution contract, the transport operator works specifically for a single customer and all vehicles, resources, staff and warehouses are dedicated to that contract. The assets may be owned by either the operator or the customer.

Under common-user distribution all resources are owned by the transport operator and offered to a number of customers at the same time. In the example above, if the secondary distribution warehouse is owned by the transport operator, he can rent space out for secondary distribution to a number of customers.

In this way, the transport operator can run a very efficient transport operation as every vehicle that goes to a bakery to deliver flour may also have a delivery of sugar to the same bakery on behalf of that supplier and some drinks to deliver to the bar next door on behalf of the brewery.

This situation puts the operator in a powerful position as he is able to make all three deliveries much more cheaply than any competitor pricing the individual deliveries. This means differentiation of service and the ability to offer lower prices whilst still maintaining the profit margin.

Summary

By completing this section of the module you will have gained an appreciation of the importance of transportation in the supply chain of all products. You will also have gained an insight into the processes at work in transportation and the relationship between them.

In particular you will appreciate the importance of distribution and how it represents an important and lucrative part of the supply chain. For transport operators in Central Asia, secondary distribution represents a better opportunity to earn hard currency than international transportation as European manufacturers start to sell their products into an area where they desperately need a **reliable, secure, consistently high quality service.**

3.3 Costing Transport Services

This section of the module covers

- ✓ Acquiring the Vehicle
- ✓ Identifying Fixed Costs
- ✓ Identifying Variable Costs

3.3.1 Acquiring the Vehicle

The main methods by which a transport operator may acquire new vehicles are:

- ✓ Outright purchase using own money
- ✓ Purchase using borrowed funds
- ✓ Leasing

3.3.1.1 OUTRIGHT PURCHASE USING THE OPERATOR'S OWN MONEY

Here the operator becomes the outright owner of the vehicle immediately. There is no interest to pay on borrowed money. However it may be that capital invested in a truck could obtain a better return elsewhere. The operator will be responsible for vehicle maintenance.

3.3.1.2 OUTRIGHT PURCHASE FROM BORROWED CAPITAL (BANK LOAN OR THROUGH VEHICLE MANUFACTURER/DEALER)

As above, the operator becomes the owner of the vehicle, but will pay the lender a monthly (or weekly) sum to repay the money borrowed plus interest.

3.3.1.3 LEASING

This is where the vehicle is owned by a leasing company and the operator pays the leasing company a rental for use of the vehicle over an agreed number of years. It is likely that the leasing company will take responsibility for vehicle maintenance, or at least have a say in where and by whom the vehicle is maintained, so as to maximise the value of the vehicle when they want to sell it at the end of the leasing period. The rental is likely to be a fixed annual or monthly charge plus a variable charge for the distance operated.

Useful Tip

Depreciation

If you own a vehicle (whether acquired using own funds or through a loan), you must remember that eventually the vehicle will become worn out and have to be replaced. Over the vehicle's life, its value will reduce from the price you paid for it until it is only worth it's scrap value. This is recognised as expenditure by an annual charge against the accounts and is known as **Depreciation.**

The annual depreciation value is calculated using specific government norms. For example, the latest available figures for Kazakhstan are:

Trucks of carrying capacity < 0.5 tons - 20% of the cost of the truck per year

Trucks of carrying capacity 0.5 - 2.0 tons - 14.3% of the cost of the truck per year

Trucks of carrying capacity > 2.0 tons:

< 200,000 kilometres per year - 0.37% of the cost of the truck per 1000kms

200-250,000 kilometres per year - 0.30% of the cost of the truck per 1000kms

250-350,000 kilometres per year - 0.20% of the cost of the truck per 1000kms

350-400,000 kilometres per year - 0.17% of the cost of the truck per 1000kms

In order to calculate the depreciation on the truck, you need to know the initial purchase price, the weight of the truck and the total kilometres run per year.

The reason for charging depreciation as a fixed cost is that it spreads the cost of purchasing the vehicle over the five years life of the vehicle rather than it becoming a 'surprise' to you after five years that you need to purchase another vehicle.

If you lease your vehicle then the leasing company (who own the vehicle) carry out exactly the same calculations as above and charge you a monthly charge for the vehicle. In this case, you are not interested in depreciation, just the monthly lease charge.

3.3.2 Choice of Method

The method of vehicle purchase which is adopted will depend on the operator's financial resources and status. The country's tax regulations may make some methods of purchase more attractive than others.

3.3.3 Identifying Fixed Costs

Many of the costs of running a transport operation do not vary directly with the amount of work undertaken and distances travelled. These are called Fixed Costs.

Examples of Fixed Costs are:

- ✓ capital costs (interest on borrowed money or leasing payments)
- ✓ road tax
- ✓ depreciation
- ✓ insurance
- ✓ basic cost of employing a driver so that he is available for work.

Other fixed costs are listed on Form 3.1.

3.3.4 Identifying Variable Costs

Other costs change directly with the amount of work undertaken and distance travelled. These are called Variable Costs.

Examples of Variable Costs are:

- ✓ fuel and lubricants
- ✓ vehicle maintenance (both replacement parts and labour)
- ✓ tyres
- ✓ some drivers costs
- ✓ overnight stays
- ✓ parking
- ✓ border tolls

A list of Variable Costs is shown on Form 3.1.

3.3.4.1 CALCULATING TOTAL OPERATIONS COSTS

Form 3.1 can be used to identify and quantify each individual operational cost, classifying them as either fixed or variable costs.

This analysis can be carried out at a number of different levels in your business:

- ✓ for the whole business;
- ✓ for an individual operating centre or depot;
- ✓ for an individual service (for example haulage);
- ✓ for an individual customer;
- ✓ for current customers in a market segment in which you are working.

Form 3-1 **Operating Costs**

Location :		**Customer :**	
Main Fixed Costs		**Main Variable Costs**	
Vehicle Depreciation		Fuel & Lubricants	
Vehicle Leases .		Servicing Costs & Spare Parts	
Space Rental		Overnight Stays	
Licences		Parking and Tolls	
Basic Employee Costs		Employee bonus	
Communications		Communications	
Other fixed costs		Other variable costs	
Total Fixed Costs		**Total Variable Costs**	

Fixed costs expressed as USDXX per:	hour, day, week, month, quarter or year.
Variable costs expressed as USDX per:	kilometre, load, pallet, ton.

Note : Communication costs have both fixed elements (line rental etc) and variable elements (call charges). Basic Employee costs include base salary, social fund contributions and any other statutory contributions made by the employer.

The level at which you choose to do the analysis must be logical. The services or customers or locations that you include in a costing exercise must all have the same cost pattern. You must not calculate the operating cost for your business as a whole and then set a price for an individual service on that basis without checking whether the cost structure for providing that service is the same as for your overall business.

Summary

By completing this section of the module you will be able to identify the different elements of the costs of your business. It is important to recognise the difference between fixed and variable costs.

Fixed costs are incurred by your business even if your trucks are not working. They are incurred every hour of the day, every day of the year whether you are working or not. It is sometimes necessary to take on unprofitable work which does at least make a contribution to the fixed costs of the business.

3.4 Pricing Transport Services

The elements covered in this section are:

- ✓ Unit Costs v Open Book
- ✓ Profit Margin
- ✓ Market Conditions

3.4.1 Unit (Load) Cost v Open Book

There are several ways in which a transport operator can charge for its services. One is to charge a fully inclusive rate for carriage of a load from A to B. Alternatively, if a number of consignments are being carried to the same destination on behalf of more than one customer, a rate per pallet or box for using the shared user service may be the best way of allocating the costs of the journey between the customers using the service. The customer will have no immediate interest in what the transport operator's actual costs are, only what the customer is being charged.

If a vehicle or vehicles are dedicated to a single customer on a continuous basis, it may be appropriate to use a system of Open Book accounting where the actual costs of operation are shown to the customer. The customer pays the transport operator for the actual costs incurred plus an agreed profit margin to the operator.

3.4.2 Profit Margin

Profit is the amount by which an operator's total income from customers exceeds the total cost of operation. It is considered to be the operator's reward for successfully running the business.

The profit margin gives the operator a return on the money invested in the business, such as the money tied up in trucks.

The profit may be taken out of the business and distributed to the company's owners as a *dividend,* or re-invested in the business, for example to finance expansion such as the purchase of additional trucks.

The amount of profit made will depend on

- ✓ market conditions
- ✓ the efficiency of the company in meeting its customers requirements

Useful Tip

Open Book Contracts

Conventional contracts are based on a unit rate.

For example:

Unit rate agreed = USD 100 per pallet

Consignment = 20 pallets

Price per load = USD 2000

Costs per load = USD 1800

Profit = USD 200

If the operator can reduce his costs from USD 1800 to USD 1600 then his profit for the load increases to USD 400.

In some cases, reduction in costs results in a reduction in customer service and reliability as operators carry out less vehicle maintenance or reduce staff.

To overcome this, some companies enter into "open-book" agreements. For these contracts, the operator allows the customer to have full access to inspect his operating costs and the customer agrees to pay those costs.

A budget is agreed for the operation and the operator's profit comes as a management fee paid by the customer in addition to meeting the costs of the operation.

That management fee (or profit) will be reduced if the budget is exceeded and the agreed service levels are not met. However if the operation is within budget and the agreed service levels are improved upon, the operator can earn a higher management fee or profit.

So in this case, the size of the management fee (and therefore the size of the profit) is dependent on the operator meeting agreed customer service levels.

If the operator fails to reach the minimum service levels he fails to receive the agreed profit level.

3.4.3 Market Conditions

In a free market economy, the prices that can be obtained from customers for transport services will depend on the **supply and demand** for those services.

3.4.3.1 HIGH DEMAND/SHORT SUPPLY

If there is a high demand for transport services and insufficient vehicles and drivers available to meet this demand, transport operators will be able to increase their charges to customers. In this type of market, customers will be competing with each other for the available transport resources.

3.4.3.2 LOW DEMAND/HIGH SUPPLY

In this market, there are more vehicles and drivers than there is work available.

Transport operators will be competing with each other to offer customers the lowest charges and best service. Operators may have to reduce their charges to retain their customers in the face of lower prices being offered by other operators for the work.

In these conditions it is essential that transport operators look very carefully at ways of reducing their operating costs and improving the efficiency of their operations, such as through more efficient vehicle scheduling.

In the short term, it may be worthwhile for the operator to undertake work at less than full cost provided that, as a minimum, the income from the work exceeds the variable costs of operation. This will produce a contribution to help to offset the operator's fixed costs.

However, in the longer term, the transport operator that does not cover the full costs of operation (including vehicle depreciation) will go out of business.

Useful Tip

Competing through Quality

It is also necessary under these market conditions to compete on a basis other than price. Differentiation through greatly increased quality of service will provide you with a means of lifting your service out of the spiral of reducing prices and hence reducing profit margins.

However, increasing the quality of service will often result, especially in the short term in increasing your costs. You have to be sure that:

your current and potential customers need the increased quality;

they perceive the difference offered by you;

that they are willing to pay extra for that quality and reliability;

that your competitors cannot easily copy you at a lower price;

If you get this wrong, you will be increasing your costs in a low price market and you will go out of business.

Understand your market, your capability and your cost base.

Summary

By completing this section of the module you will appreciate that, whilst costing is about the facts of your business, pricing your transport services is a matter of judgement concerning both your knowledge of your own cost base and your understanding of the market.

Your position on pricing will not be the same for all markets and it may not be the same at all times of the year. Pricing has to be flexible and must reflect the market conditions.

3.5 Vehicle Maintenance

Regular preventative vehicle maintenance is essential, especially as spare parts are in short supply. This will enable vehicle breakdowns to be minimised, therefore helping you to provide a reliable service to their customers, which in turn will help retain and acquire new business.

In post-soviet Central Asia, the supply of spare parts for vehicles has become a considerable problem. This means that a good preventative maintenance programme is even more important in Central Asia than it is in Europe.

Your vehicle must be maintained to a rigid schedule. It is always tempting to delay routine servicing because the vehicle is out on the road and earning money. It is almost always wrong to do so and will always result in a higher than necessary spend and a longer period off the road.

Useful Tip

Driver's Daily Inspection Sheet

Each driver should be expected to carry out a brief inspection of his vehicle at the beginning of each day. In this way, potential problems can be seen in advance.

Driver's Daily Inspection Form

Vehicle Registration Number : _____

Date : _____

Brakes	_____	Engine	_____	Wheel Nuts	_____
Handbrake	_____	Oil Level	_____	Tyres - wear	_____
Indicators	_____	Hydraulics	_____	Tyres - air	_____
Headlights	_____	Coolant	_____	Spare -air	_____
Tail Lights	_____	Antifreeze	_____	Load fixings	_____
Brake Lights	_____	Other Fluids	_____	Locks	_____

Permanent maintenance records - a vehicle history file - must be kept on each vehicle and this should show an record of each scheduled service plus any problems with particular parts of the vehicle.

3.5.1 Making Assets Work

This section of the module covers how the operator's assets can be made to made to work harder for the business. When the vehicle is not in use it is not making money. However, fixed costs such as capital costs and leasing payments, and the basic cost of a driver are still being incurred. The operator should aim to find as much productive work as possible for the vehicle so as to maximise the return on the money invested in the vehicle.

Examples of where improvements can be made are:

- ✓ Scheduling
- ✓ Multi-shifting
- ✓ Warehousing
- ✓ Adding Value

3.5.2 Scheduling

Improvements in the efficiency of vehicle scheduling can be made by:

- ✓ Arranging backloads from the destination back to base, rather than return empty.
- ✓ Triangular runs, where a return load can be obtained from a point reasonably close to the destination can also significantly improve vehicle productivity.

3.5.3 Multi-shifting

To maximise return on the asset, the vehicle should work as many hours as possible, after allowing for maintenance requirements. This can include night time and weekend work. The vehicle is capable of working more hours than any individual driver, so 2 (or more) drivers per vehicle can be employed.

A high level of vehicle utilisation will allow the fixed costs of operation to be spread over a greater amount of work, therefore causing the unit costs of individual journeys to fall. In turn this will make the transport operator more competitive by being able to offer lower charges to its customers.

3.5.4 Warehousing

Transport operators may be able to offer storage facilities for their customers' goods, in addition to providing transport. This could be of particular interest to the operator's customers where warehousing can be provided close to the point of demand for the goods.

There may be opportunities for the operator to provide both primary transport into the warehouse, and secondary transport from the warehouse to the point of consumer demand.

As discussed in the introduction, secondary transport may require a different type of vehicle to the primary run, and the warehouse may be a suitable transhipment point.

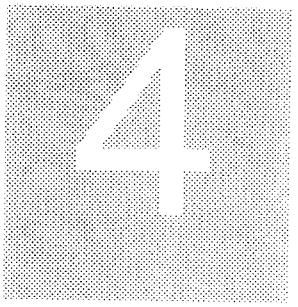
3.5.5 Adding Value

In a simple case of moving a load from A to B, the customer has a choice of many transport operators who are equally capable of undertaking the work at an acceptable price. However, there may well be ways in which an operator can provide a higher level of service to specific market sectors by offering a greater level of understanding of the total needs of a customer's industry and business.

This could include the provision of services which are complementary to transport, such as

- ✓ warehousing
- ✓ stock management
- ✓ labelling of goods prior to delivery to shops

In the West, many transport operators have widened the scope of their business to include warehousing and inventory management for their customers, and/or have specialised in providing services to certain market sectors.



4. Accounting

4.1 Introduction

When you have completed this module, you will be able to:

- *know the difference between financial and management accounting;*
- *understand the importance of budgeting and monitoring the actual performance of the business against the budget*
- *be able to produce an updated budget for the next period, on the basis of what has actually happened in the last period*
- *put together a financial plan for your business;*

4.2 Financial and Management Accounting

DEFINITION FINANCIAL ACCOUNTING

📖 Financial Accounting is concerned mainly with:

✓ reporting on the state of the business to people beyond th management of the company, such as investors and the government;

✓ reporting on what has happened in the past rather than being used as a base for taking decisions about the future;

Each business has to report on its financial performance, normally onc per year. In western economies, the accounts of every business have to b presented in a set format. This ensures that year on year comparisons ca be made for each business and also ensures that different businesses can b consistently compared.

The latter point is important because the financial accounts for a busines allow the determination of the amount of tax paid to the government an allows investors to decide which businesses to invest their money in t generate the best profit possible.

Financial accounting is examined in more depth in section 4.4.

Information is a vital resource for any business. We have already seen how important information is regarding the marketing of your transportation services and the pricing of those services to give you a good profit from your business. Accounting is the formal collation of information regarding the business and as such is a vital element of any business.

DEFINITION MANAGEMENT ACCOUNTING

📖 Management Accounting is the process of measuring an monitoring the financial and operational performance of a busines so that decisions can be made on future actions. It is an essential too for managers of a business and is inward looking rather tha outward looking.

In western economies, companies do not publish their managemen accounts - they are confidential and show the true picture of how th business operates. A company that has good management account has a good basis on which to make operational, marketing an strategic decisions concerning the direction of the business Management Accounting is covered in more depth in Section 4.3.

4.3 Management Accounting

The process of management accounting involves:

- ✓ budgeting
- ✓ phasing the budget
- ✓ monitoring the performance of the business
- ✓ forecasting cash flows

4.3.1 Budgeting

This involves the use of all available information to produce a financial plan for the business for the year ahead and the monitoring of the actual performance of the business against that plan at regular intervals. The process is basically

- ✓ estimate how much business the company will do for each service and each customer for the year ahead.
- ✓ calculate the income that will be received as a result of that level of business for each customer
- ✓ calculate the costs of providing that service to that level for each customer
- ✓ calculate the estimated contribution to profit from each service
- ✓ estimate the level of overhead costs and subtract them from the overall contribution level.

Form 4-1a Operating Budget

Location ::		Year Ending					
	Total for Year	*Months*					
		1	2	3	4	5	6
1. Income from Customers							
Customer A							
Customer B							
Customer C							
Total income (1)							
2. Variable Costs							
Fuel & Lubricants							
Servicing costs & spares							
Overnight Stays							
Parking & tolls							
Employee bonus							
Communications							
Other variable costs							
Total Variable Costs (2)							
Contribution (1-2)							
3.Fixed Costs							
Depreciation							
Vehicle leases							
Space rental							
Licences							
Employee Costs							
Communications							
Other fixed costs							
Total Fixed Costs (3)							
Operating Profit/Loss							
Profit/Loss = 1-2+3							

Form 4-1b Operating Budget

Location ::		Year Ending					
	Total for Year	*Months*					
		7	8	9	10	11	12
1. Income from Customers							
Customer A							
Customer B							
Customer C							
Total income (1)							
2. Variable Costs							
Fuel & Lubricants							
Servicing costs & spares							
Overnight Stays							
Parking & tolls							
Employee bonus							
Communications							
Other variable costs							
Total Variable Costs (2)							
Contribution (1-2)							
3.Fixed Costs							
Depreciation							
Vehicle leases							
Space rental							
Licences							
Employee Costs							
Communications							
Other fixed costs							
Total Fixed Costs (3)							
Operating Profit/Loss							
Profit/Loss = 1-2+3							

The figures calculated for the above are formalised in a schedule which shows the estimated income, expenditure and profit for the business. An example of this is shown in Form 4.1. Use this form as the basis for your budget.

The headings to be used on Form 4.1 are :

- ✓ Income from customers
- ✓ Main Variable Costs
- ✓ Contribution to Fixed Costs
- ✓ Main Fixed Costs
- ✓ Profit/Loss

4.3.2 Phasing the budget

The financial plan should be produced for the year but that plan should then be phased to provide monthly estimates of how the business is planned to operate. Each Quarter (every three months) there should then be a formal review of actual against planned performance.

Useful Tip

Getting the phasing right

If your business performs in exactly the same way each month of the year then you can estimate the annual income and costs and simply divide them by 12 to derive your estimate for each month.

Unfortunately, most transport businesses are highly seasonal with peaks of work in some months and troughs of little work in others. For instance, working for some agricultural customers will mean a concentration of work into perhaps only 2 months of the year. Phasing the variable costs for that service over 12 months instead of just those 2 will give a very false picture and any decisions taken on that basis will be wrong.

Under most circumstances, the fixed costs of your operation can be spread equally over each month but the variable costs must closely reflect the spread of the work.

4.3.3 Performance Monitoring

The Quarterly Review process will allow you to regularly monitor the actual performance of your performance compared to what was estimated at the planning stage. Each Quarter, the actual income and expenditure is compared with the budgeted levels and the differences highlighted.

This will allow the prompt identification of any action necessary to put right these differences.

Useful Tip

Interpreting the differences

There are a number of useful rules for interpreting the differences between planned and actual performance during Quarterly Reviews.

Always try and gain an overall view of your business rather than take important decisions on just a small part.

For instance, a large shortfall in income from one particular service may be compensated for by a corresponding increase in another service.

The fact that the business has not met the original plan is not necessarily a problem if circumstances have changed since the plan was produced.

Careful analysis must be undertaken to decide whether the differences between the actual and the budget are good or bad and whether they are merely short term or indicative of a long term trend.

For instance, your costs may have exceeded the budget because you were successful in obtaining a large contract requiring additional mileage to be operated, which caused additional fuel, driver and vehicle maintenance costs to be incurred.

In this situation the operator's income will also exceed the budget, because of the revenue from the additional business. Provided that the new business has been priced correctly, profit will also exceed budget, so the overall picture is better than it would have been under the original plan.

Similarly, your income may be less than the budget if a major transport contract was lost during the period under review. However, your costs will also be down as a result of the lost business.

It may be that you will be able to redeploy vehicles and drivers on to a contract which is more profitable than the lost contract. In this case, the picture is brighter than planned even though, on initial examination, there is a loss of business.

4.3.4 Cash Flow Forecasting

A cash flow forecast is a plan of the estimated movements of cash in and out of your transport business on the basis of

- ✓ when you will have to pay your own expenses
- ✓ when you are paid by your customers

This differs from the budgeting process because the figures in the Quarterly Review are based on the date when the work was done rather than on the date that the operator receives payment from the customer.

For example, if you pay your drivers weekly but the customer does not pay until the end of the month, the operator will have to have enough cash in the business to pay the drivers wages for 4 or 5 weeks until receiving money from the customer.

Useful Tip

The importance of cash

When working for small local companies, it may be possible to receive payments in cash as soon as the job is completed. Even then, you will have incurred expenses such as fuel and drivers costs before you have received payment so you are in a '**negative cash-flow situation**'.

When working with European companies, this situation will be even worse as the payment may be as long as 90 days after the submission of your invoice. It is essential that you give full attention to your cash flow under these circumstances.

Many western transport businesses fail, even though they are actually profitable operations, because they get their cash flow wrong. **They simply run out of cash.**

The format of a Cash Flow Forecast, with examples of what will need to be included, is shown in Form 4.2

Form 4-2a **Cash Flow Forecast**

Location ::		Year Ending					
	Total for Year	*Months*					
		1	2	3	4	5	6
1. Cash Flow							
Operating Cash Balance							
Cash Income from Customers							
Total Cash Available							
2. Cash Outflow							
Variable Costs							
Fuel & Lubricants							
Servicing costs & spares							
Overnight Stays							
Parking & tolls							
Employee bonus							
Communications							
Other variable costs							
Total Variable Cash							
Out Goings							
Fixed Costs							
Depreciation							
Vehicle leases							
Space rental							
Licences							
Employee Costs							
Communications							
Other fixed costs							
Total Fixed Cash							
Out Goings							
Capital Expenditure							
Total Cash Outflow							
Net Cash Inflow/Outflow							

Form 4-2b Cash Flow Forecast

Location ::		Year Ending					
	Total for Year	*Months*					
		7	8	9	10	11	12
1. Cash Flow							
Operating Cash Balance							
Cash Income from Customers							
Total Cash Available							
2. Cash Outflow							
Variable Costs							
Fuel & Lubricants							
Servicing costs & spares							
Overnight Stays							
Parking & tolls							
Employee bonus							
Communications							
Other variable costs							
Total Variable Cash							
Out Goings							
Fixed Costs							
Depreciation							
Vehicle leases							
Space rental							
Licences							
Employee Costs							
Communications							
Other fixed costs							
Total Fixed Cash							
Out Goings							
Capital Expenditure							
Total Cash Outflow							
Net Cash Inflow/Outflow							

4.4 Financial Accounting

Whilst Management Accounting has an internal focus for your business in enabling you to monitor performance and take necessary management action, financial accounting has more of an external focus.

Each business must produce a set of financial accounts to enable current and potential investors to determine the return they can expect from that investment compared to other options for investing their money. The financial accounts are also used to enable the government to decide how much taxes your business should pay.

For consistency, each country has set conventions which have to be followed in the preparation of financial accounts. For this reason, this manual is not considering financial accounting in any depth but a brief overview follows.

The main elements of a set of financial accounts are:

- ✓ the profit and loss account;
- ✓ the balance sheet.

4.4.1 The Profit and Loss Account

The profit and loss account is a summary of the trading activity of your business for the financial year. It comprises all the elements that you have identified in the budgeting and monitoring processes but summarises them for the whole year into a set format.

The profit and loss account will show profits (or losses) before and after taxes have been paid and before and after the payment of interest on loans. This enables the true trading picture to be seen.

For instance, your business could be a profitable one with good operations but show a loss for one year because of the interest payments on a large bank loan. Showing profit before and after interest will show that the true underlying business is profitable even though, in the short term, the interest payments make it appear unprofitable.

4.4.2 The Balance Sheet

The Balance Sheet for a business is a summary of the assets and liabilities that the business has and carries forward from year to year. Whilst the profit and loss account is a snapshot of the trading strength of the business at a single point in time, the Balance Sheet is a summary of the substance of the business over time.

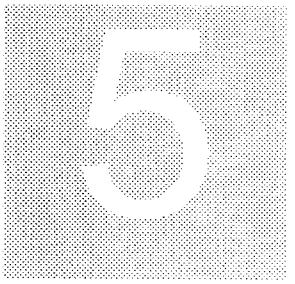
A good business has a strong Balance Sheet with evidence of profits being reinvested into the asset base of the business.

Summary

By completing this module you are now able to produce a detailed budget for your business phased across the year on a monthly basis. More importantly, you will use this phased budget as a basis for monitoring the business by comparing the achieved performance of the business with the planned performance every three months.

Monitoring and checking the variance to this frequency will enable you to control your business tightly and has the flexibility to enable you to change the direction of your business slightly as markets and the economy changes through the year.

Businesses that do not follow the Plan (budget) - Act - Monitor approach are more likely to fail because they have an uncertain direction and are unable to react to changes because they do not realise that change is necessary until it is too late.



5. Summary

5.1 Introduction

This manual and the workshops which have accompanied it enable you to:

- *systematically consider your market and its main components*
- *develop a marketing strategy and action plan*
- *understand the services you are offering and their potential for expansion*
- *develop a sound basis for costing and pricing your operation*
- *develop a method of identifying your major cost and profit items*
- *use that method to track the performance of your enterprise*

5.2 Plan /Act /Monitor

There are three main reasons for compiling a business plan

1. to reduce uncertainty about the future trading of the business
2. to present a considered view of future trading to potential investors in the business
3. to provide the managers of the business with a working document to control the business

The processes described in this manual enable you to prepare the plan for your business. In order to use the plan as a control document the following needs to occur:

1. establish targets that are measurable
2. collect information that relates to those targets
3. regularly monitor the performance of your operation in respect of those targets.

5.2.1 Establish targets that are measurable.

Examples of this are as follows:

5.2.1.1 MARKETING

- ✓ increase the revenue from Customer A by 10% by December 1996
- ✓ establish an operation in Oblast X by September 1996

5.2.1.2 OPERATIONS

- ✓ reduce empty running by 10% by March 1997
- ✓ reduce the number of vehicle breakdowns by 5% by April 1997
- ✓ increase the utilisation of vehicles by 2% by December 1996

5.2.2 Collect management account information

There are probably only a few pieces of information that are really important to you concerning your operation. These key indicators should be established for each function in the business and have been discussed in Section 4 of the manual.

5.2.3 Regularly monitor the performance

Plans and targets were a familiar part of business life in the old Soviet planned economies. Under those regimes, the system failed to work because performance against those targets was not regularly monitored.

Once targets have been established and indicators set to measure performance then reviews should occur regularly. The frequency of review will be determined by the nature of the indicators. For instance, the amount of empty running may be measured every week and progress checked towards meeting the target mentioned above.

5.3 Summary

The future is uncertain for any business.

Use of this manual will enable you to minimise this uncertainty by considering different options for the future in compiling your business plan. This however is only the start. Because the future is uncertain, the assumptions made in the plan may be wrong and will almost certainly need changing during the course of the plan.

The key difference between managing a business in an open market and managing a business under the old Soviet system is the need to be flexible. Regular monitoring of performance against plan will enable you as managers to take action to ensure that your targets are met and that your business is a success.

ANNEX K

DELEGATE FEEDBACK FROM THE ALMATY SEMINAR

Delegate feedback from the Almaty Seminar

Each delegate attending the seminar was given a feedback sheet to complete at the end of the week.

The delegates were asked to rate each defined session in terms of:

Interest
Usefulness
Presentation

Each category was rated by the delegate as one of:

Excellent
Very Good
Satisfactory
Poor

The define scenarios were:

Transport Regulations

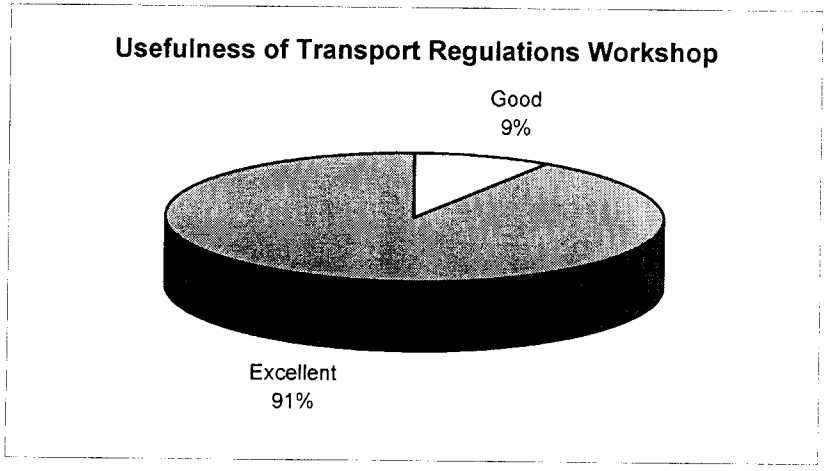
Transport Business Management

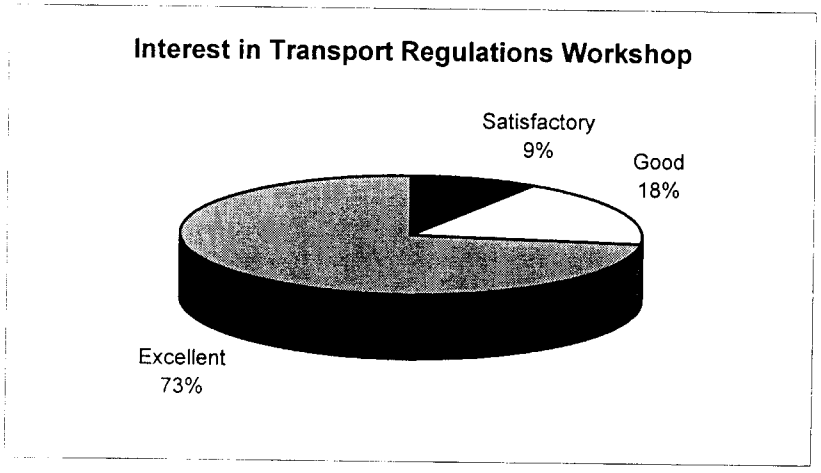
- Marketing
- Operation
- Accounting

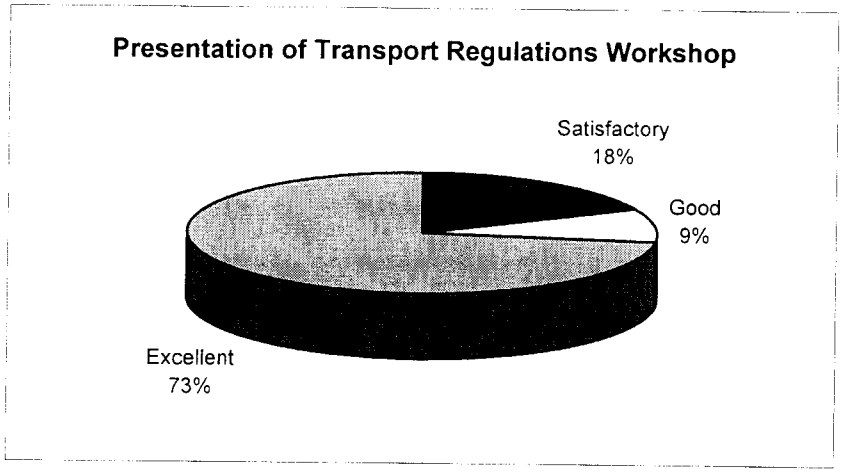
The Iveco presentation

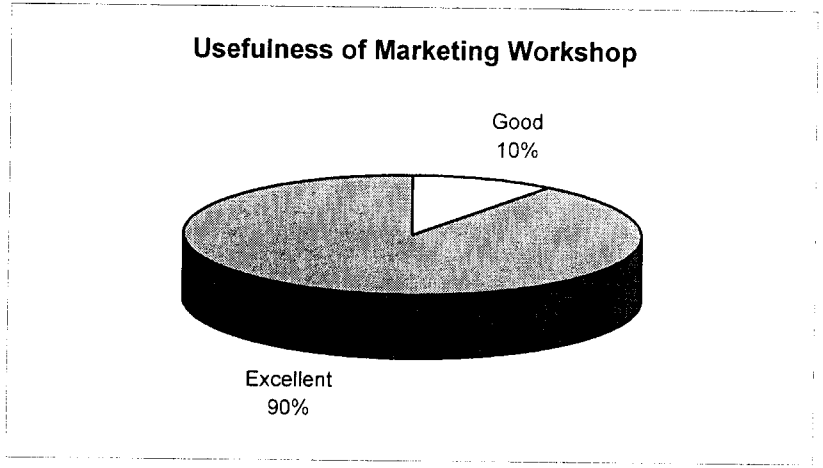
The Sealand presentation

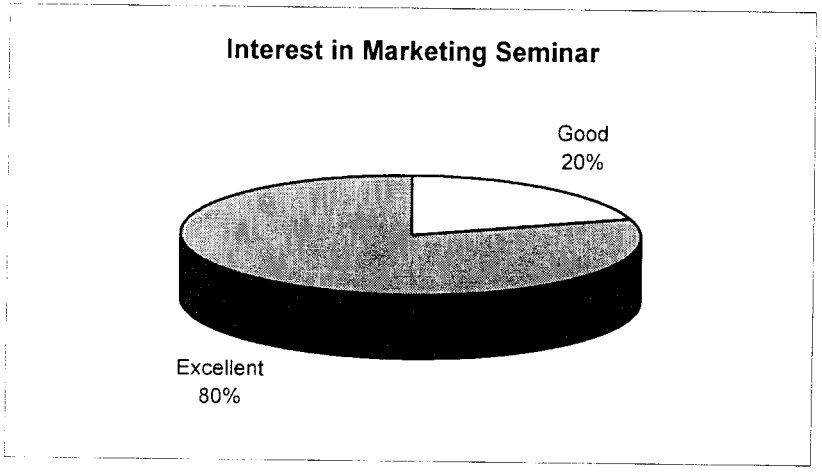
Graphical presentation of the results of the survey are shown below:

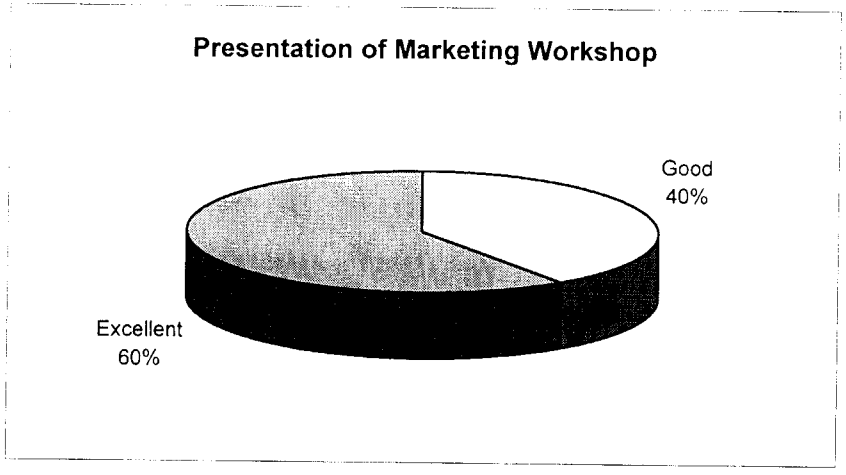

Usefulness of Transport Regulations Workshop
Good
9%
Excellent
91%

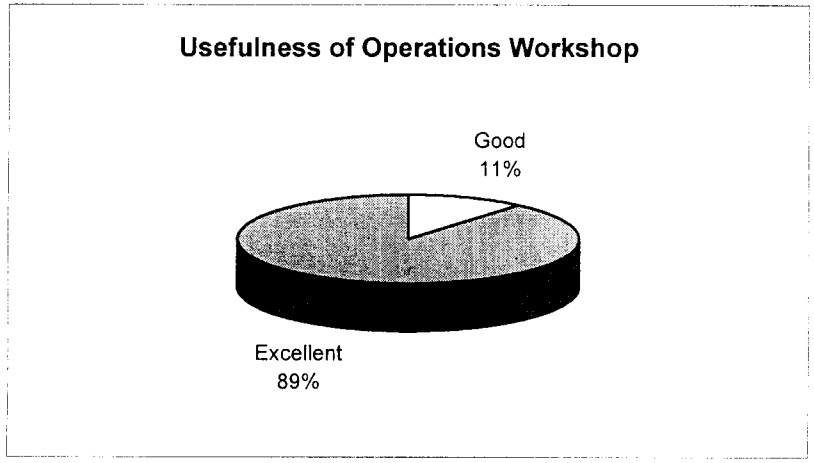

Interest in Transport Regulations Workshop
Satisfactory
9%
Good
18%
Excellent
73%

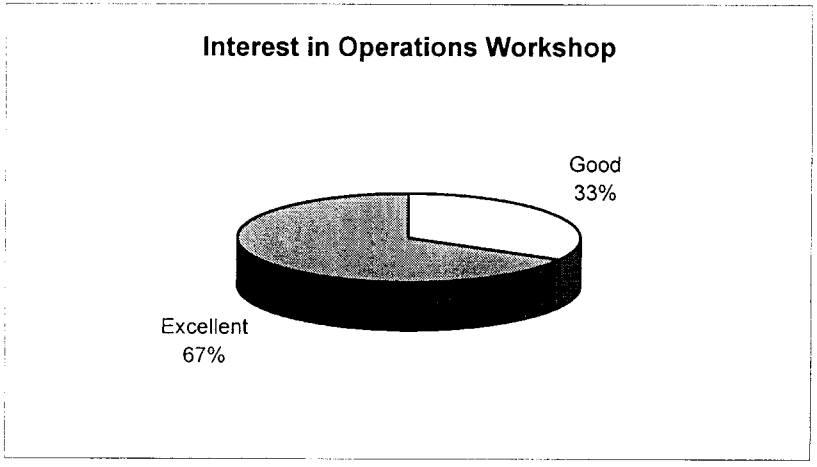

Presentation of Transport Regulations Workshop
Satisfactory
18%
Good
9%
Excellent
73%

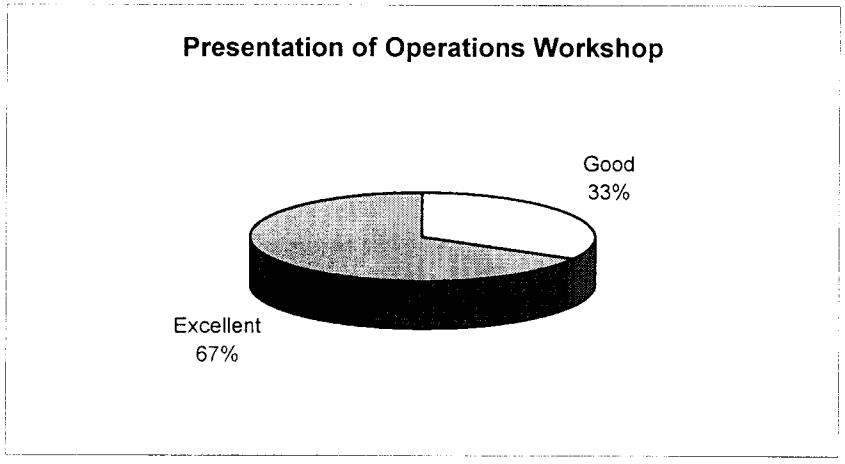

Usefulness of Marketing Workshop
Good
10%
Excellent
90%

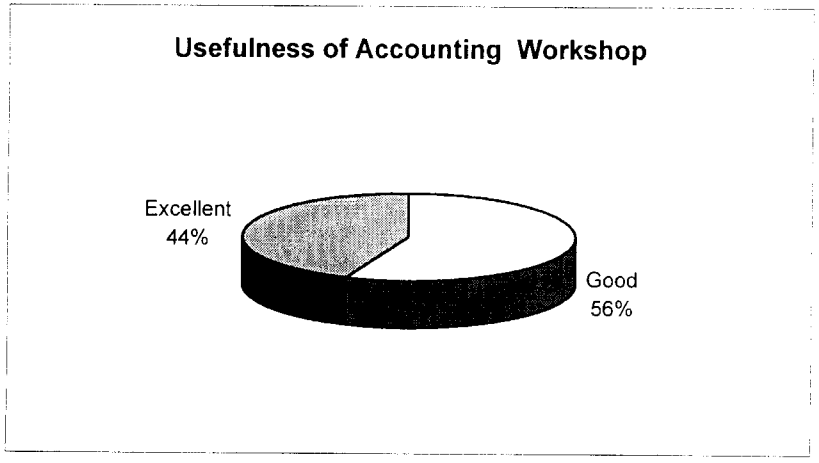

Interest in Marketing Seminar
Good
20%
Excellent
80%

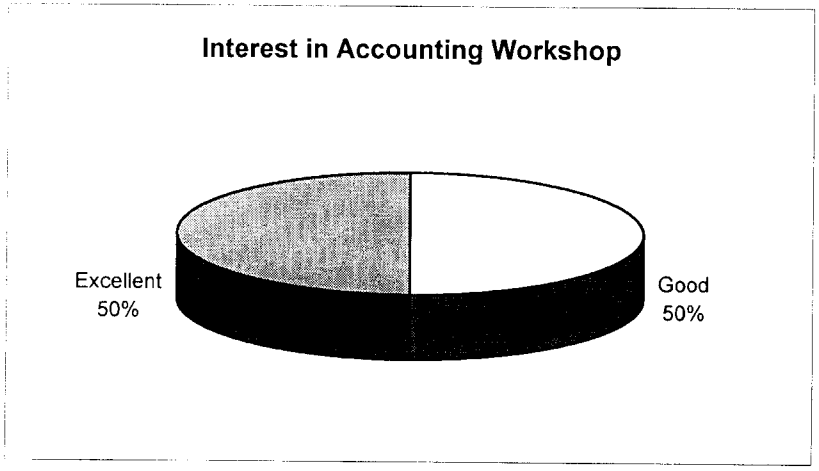

Presentation of Marketing Workshop
Good
40%
Excellent
60%

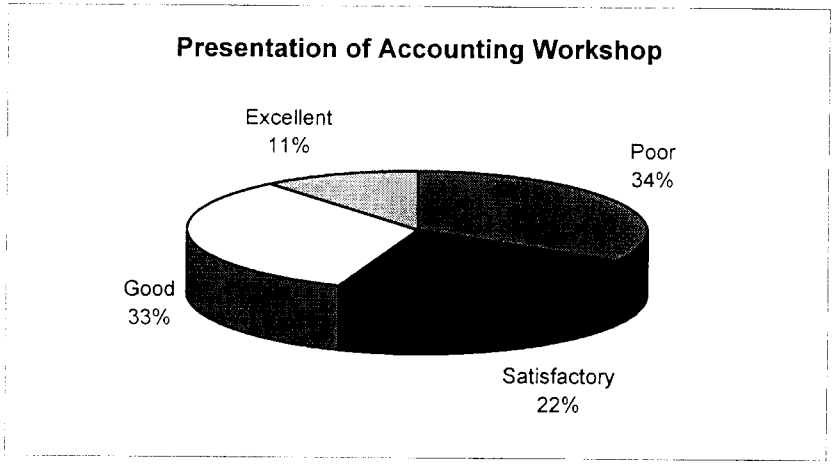

Usefulness of Operations Workshop
Good
11%
Excellent
89%

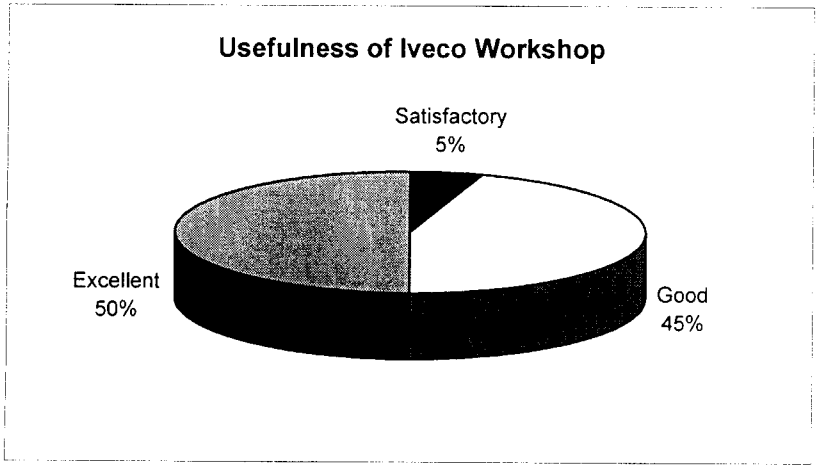

Interest in Operations Workshop
Good
33%
Excellent
67%

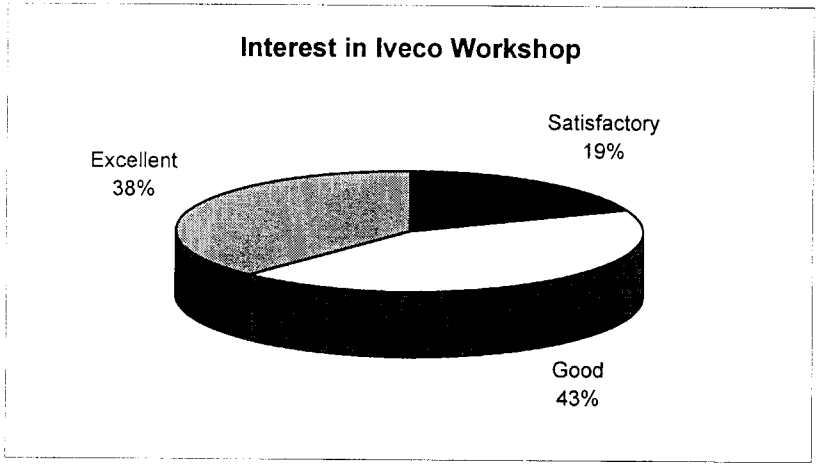

Presentation of Operations Workshop
Good
33%
Excellent
67%

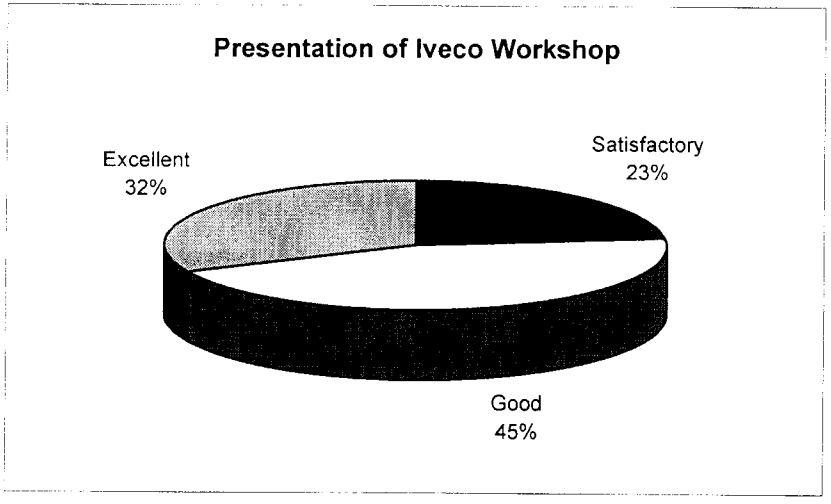

Usefulness of Accounting Workshop
Excellent
44%
Good
56%

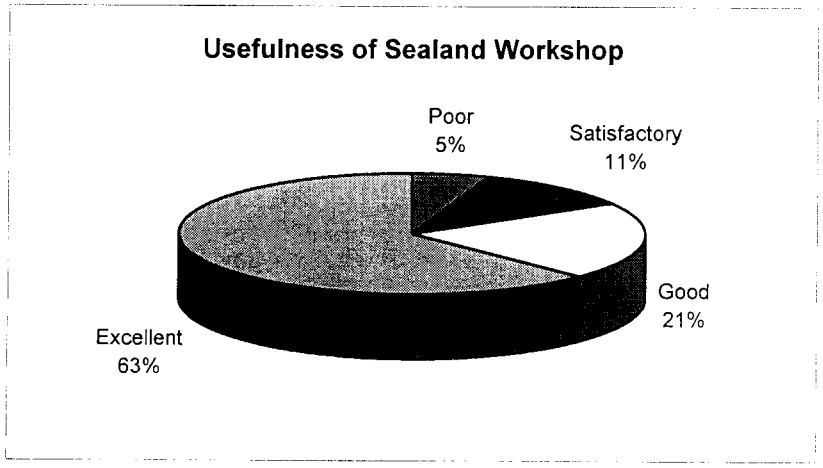

Interest in Accounting Workshop
Excellent
50%
Good
50%

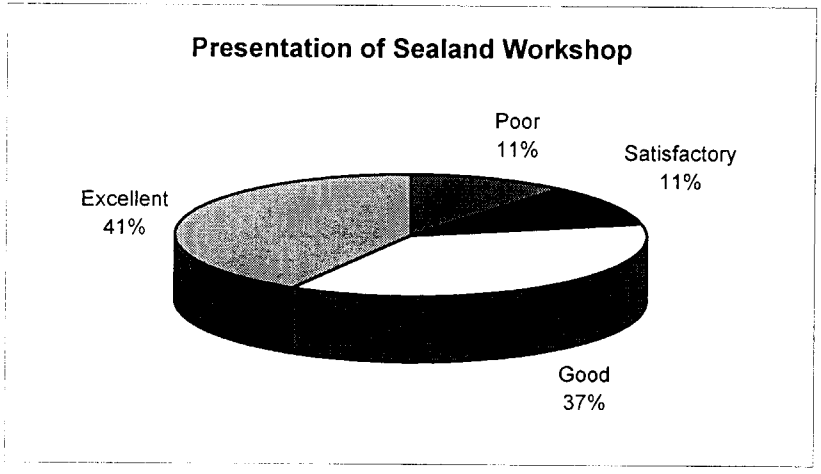

Presentation of Accounting Workshop
Excellent
11%
Poor
34%
Good
33%
Satisfactory
22%

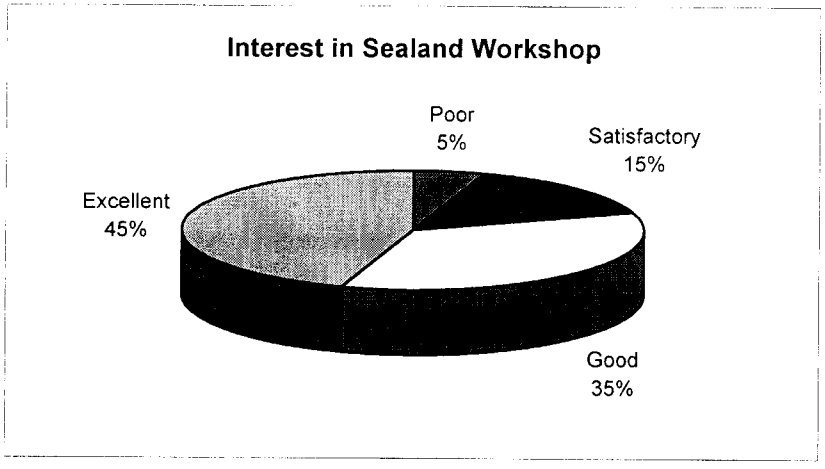

Usefulness of Iveco Workshop
Satisfactory
5%
Excellent
50%
Good
45%


Interest in Iveco Workshop
Satisfactory
19%
Excellent
38%
Good
43%


Presentation of Iveco Workshop
Excellent
32%
Satisfactory
23%
Good
45%


Usefulness of Sealand Workshop
Poor
5%
Satisfactory
11%
Good
21%
Excellent
63%


Presentation of Sealand Workshop
Poor
11%
Satisfactory
11%
Excellent
41%
Good
37%


Interest in Sealand Workshop
Poor
5%
Satisfactory
15%
Excellent
45%
Good
35%

ANNEX L

A DRAFT COPY OF THE PROGRAMME FOR THE UK STUDY TOUR

FREIGHT TRANSPORT ASSOCIATION

TRAINING SERVICES

TRACECA - IMPROVEMENT OF ROAD TRANSPORT SERVICES CENTRAL ASIA

DRAFT UK TRAINING PROGRAMME

Objective: To build on the foundation course held in Almaty with respect to the compliance schedule for international road freight operations and business development opportunities.

The delegates will see and discuss the business opportunities with UK operators and the regulatory regimes applicable to international road transport relative to the standards required to meet the service and quality requirements.

DAY ONE **4 SEPTEMBER 1996**

Arrival at Heathrow/Gatwick Airport
Coach transfer to FTA Management Training College, Wadhurst, East Sussex.

Course Introduction *Keith Taylor*

Evening Dinner

DAY TWO **5 SEPTEMBER 1996**

08.00 Breakfast

09.00 Commercial aspects of international transport *Sue Moody*
- the terms of international conventions
- conditions of carriage
- TIR carnets
- customs procedures
- drivers requirements
- permits and quotas

12.30 Lunch

13.30 Visit to Spedition Services Ltd, Surbiton Surrey
(a major international haulier and freight forwarder)

- structure of the company *Leonard Tiller*
- business links with the FSU
- products carried
- business ventures
- quality and service requirements
- types of vehicles operated
- difficulties encountered

19.30 Dinner

DAY THREE 6 SEPTEMBER 1996

08.00 Breakfast

09.00 The criteria for operator licensing and access to the profession of road haulage *Mark Bratt*

- The EU Directive
- financial requirements
- requirements for good repute
- records for tachographs and maintenance
- overloading of vehicles
- environmental considerations for depot operations
- the compliance requirements for international operations
- the operation of CPC - access to the profession

12.30 Lunch

13.30 Visit to the South Eastern Licensing Authority, Eastbourne

- Procedures for application *Brigadier Turner - Traffic Commissioner*
- Powers of the Licensing Authority
- Enforcement measures
- Obligations and requirements of the vehicle operator

19.30 Dinner

DAY FOUR **7 SEPTEMBER 1996**

08.30 Breakfast

09.30 Visit to the Pantiles

Packed Lunch

Shopping in the Royal Victoria Place, Tunbridge Wells

19.30 Dinner

DAY FIVE **8 SEPTEMBER 1996**

08.00 Breakfast

09.00 Depart FTA College with picnic lunch for London sightseeing tour, to include:-

- Buckingham Palace, changing of the guard
- Houses of Parliament
- Westminster Abbey
- Madame Tussauds

17.30 Return to FTA College

19.00 Dinner - Sunday Roast

DAY SIX **9 SEPTEMBER 1996**

08.00 Breakfast

09.00 Standards and Enforcement in Road Haulage *Ron Rider*

- Maintenance requirements
- Vehicle Testing
- Trailer Testing
- Type Approval
- Types of maintenance contracts
- The operation of dealership networks for goods vehicles in Europe

12.30 Lunch

13.30 Visit to the Vehicle Inspectorate Executive Agency - Vehicle Testing Station, Purfleet

- Structure and role of the Agency
- Presentation of vehicles for test
- Testing equipment
- Procedures & documentation
- Linkage with Operator Licensing

19.30 Dinner

DAY SEVEN 10 SEPTEMBER 1996

08.00 Breakfast

09.00 Visit and discussion to Iveco Ford, Langley *Chris Thorneycroft-Smith*

- vehicle specifications
- availability of IFT trucks
- spares and maintenance facilities
- sourcing vehicles in Central Asia

19.30 Dinner

DAY EIGHT 11 SEPTEMBER 1996

08.00 Breakfast

09.00 Fleet Financing

- Sources of funds
- linkage with business plans
- types of purchase arrangements
  - new trucks
  - used trucks
- types of leasing contracts

12.30 Lunch

14.00 Fleet Insurance — *Paul Merlino*

- types of insurance
  - vehicle
  - vehicle parts
  - load
  - goods in transit
  - CMR
- high risk products
- theft prevention measures
- limitations on cover
- liabilities of the parties
- accident damage to vehicle and load

19.30 Dinner

DAY NINE **12 SEPTEMBER 1996**

08.00 Breakfast

09.00 The role of a transport trade association — *Roger Nolan*

- the needs and benefits of the membership
- the business plan
- services offered to the membership
- structure of membership fees
- networking business links

10.30 Coffee

11.00 Environmental considerations in Road Transport — *James Hookham*

- vehicle emissions
- carriage of hazardous cargo
- vehicle and depot environmental management

12.30 Lunch

14.00 The drivers hours requirements and the use of tachographs — *Robin Sharp/ Angela Whitehouse*

- European requirements on drivers hours and rest periods
- The operation and use of tachographs

- Management of the transport operation through the data obtained from tachographs
  - speed
  - distance travelled
  - hours of driving
  - rest periods
  - routing and planning of vehicle schedules
- Practical demonstration of tachograph analysis

19.30 Dinner

DAY TEN **13 SEPTEMBER 1996**

08.00 Breakfast

09.00 Fleet Efficiency - standards of performance and methods of measurement — *Simon Chapman*

- vehicle operating costs
- vehicle maintenance costs
- labour costs
- parts and equipment costs
- benchmarking methods
- fuel management

12.30 Lunch

2.00 Presentation of activities, needs and service levels required from major operators and users of transport

- Sea - Land — *Jack Helton*
- Intercity Trucks — *John Meehan*
- Shell — *Martin Leah*
- Master Foods - Mars Group — *Garry Mansell*

19.30 Buffet dinner/garden party with suppliers of services and users of transport in the FSU.

DAY ELEVEN **14 SEPTEMBER 1996**

08.00 Breakfast

OPTIONAL SESSION - EITHER:

09.00 Road Construction *Don McIntyre*

- Government role in provision of road infrastructure
- Traffic safety considerations covering barriers, dividers, bridges, curves etc.
- Road repair procedures and quality issues
- Local authority responsibilities
- Ecological considerations
- Private financing initiatives
- Planning procedures
- Role of the Highways Agency

OR

Private discussion with operators on business issues

12.30 Lunch

14.00 Visit to Hastings

19.30 Dinner

DAY TWELVE 15 SEPTEMBER 1996

08.00 Breakfast

09.00 All day visit to Windsor Castle, including picnic lunch

19.30 Dinner

DAY THIRTEEN 16 SEPTEMBER 1996

08.00 Breakfast

09.00 Developing a business plan for establishing and running courses for international road transport - access to the profession (CPC) *Keith Taylor/Mick Jackson*

- Identify and define roles and functions of
  - governing body
  - examining body
  - training providers

- Criteria required for authorised training providers
- Examination procedures
- Establishing target market
- Developing a sales and marketing plan
- Developing a financial plan
- Target dates and implementation plan

19.30 Dinner

DAY FOURTEEN 17 SEPTEMBER 1996

08.00 Breakfast

09.00 As day thirteen with group presentation and critique

19.30 Farewell dinner

DAY FIFTEEN 18 SEPTEMBER 1996

Delegates Depart

LIST OF SPEAKERS

Keith Taylor	Executive Director - Personnel & Business Services - FTA
Sue Moody	Manager - International Affairs - FTA
Lenard Tiller	Marketing Director - Spedition Services Ltd
Mark Bratt	Training Manager - FTA
Brigadier Turner	Traffic Commissioner
Ron Rider	Head of Vehicle Engineering - FTA
Chris Thorneycroft- Smith	Director of Marketing Support - Iveco Ford
Simon Chapman	Economist - FTA
Jack Helton	Managing Director - Sea-Land - East Europe
John Meehan	Marketing Executive - Intercity Trucks
Martin Leah	Sales Executive - Shell Oil
Garry Mansell	Distribution Executive - Master Foods
Don McIntyre	Controller - Highways & Roads - FTA
Roger Nolan	Secretary & Director of Finance - FTA
James Hookham	Executive Director - Transport Policy - FTA
Robin Sharp	Controller - Vehicle Inspection Services & Freightcheck - FTA
Angela Whitehouse	Freightcheck Manager - FTA
Mick Jackson	TACIS Project Manager
Paul Merlino	Insurance Expert - Johnson & Higgins