

AZERBAIJAN REPUBLIC Ministry of Transport

Azerroadservice (OJC)

Technical Assistance to the Government of Azerbaijan

On the Azerbaijan Road safety program

TECHNICAL REPORT 1

Task 3/Capacity Building for the Azerbaijan State Road Police

December 2010

Preface

The purpose of this Draft Technical Report 1 is to

- Present the assessment of the current resources, activities etc in the State Road Police
- Outline a systematic approach to a capacity building program for State Road Police
- Deliver the proposal on the development program
- Deliver the proposal of equipment needs.
- Be a useful document, especially Chapter 3, when carrying out education and training courses in order to increase the capacity of the State Road Police.

Traffic Law Enforcement Specialist Håkan Jaldung, SweRoad, has prepared this Draft Technical Report 1.

It is translated to Azari by Samira Shirinova. The translation is checked by Rufat Hasanov.

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Abbreviation

ARSP	Azerbaijan Road Safety Program
ATC	Automatic Traffic Control
ToR	Terms of Reference
TR	Technical Report

Executive summary

Capacity building of the State Road Police is stipulated in the ToR. The basic assessment of the State Road Police has indicated that there is a need of capacity building and improvement

The Draft Technical Report1 (TR 1) includes the basic theoretical issues regarding traffic enforcement to use as background material to the professional capacity building program for State Road Police. The topics presented in the report are based on international experiences, knowledge and best practises. Chapter 3 in this report will be used during the Management Course for High-ranked State Road Police officers.

The report also contents:

- Development of the draft training program including the Workshop, the Leadership course, the Trainers/Instructors course and Police officers course.

The program will be finalized and presented in the Technical Report 2 (TR 2) on training needs.

- The draft proposal on equipment needs.

The program on equipment needs will be finalized and presented in the Technical Report 3 (TR 3).

The Draft TR 2 and TR 3 will be finalized by the end of December 2010.

The ARSP will carry out some baseline studies to be used as a background for planned surveillance actions on the use of seat belts and over speeding. The State Road Police will carry out these baseline studies from year 2011. The systematic approach of the baseline studies will be discussed and planned during the Management course for high-ranked Police officers.

Performance indicators should be developed by the Consultant as soon as requested information from the State Road Police is available, see Appendix 1.1 to 1.3.

The development of Technical Report 2 on Training needs and the Technical Report 3 are based on presented international knowledge and experiences and the proposals in this report. The Technical Report 2 and 3 will also be based on information requested from the State Road Police.

However, the requested information from the State Road Police is not yet available for the Consultant which could delay the finalization and distribution of these two reports.

There is a lack of available information to the Consultant depending of the nature of the State Road Police as a police organization. The State Road Police have some security limitation to confide the Consultant with requested information on activities, resources and results.

However, the requested information is of essential importance when developing a Capacity Building program for the State Road Police.

During the proposed Workshop and the Management course for high-ranked Police officers it is a good opportunity for the Consultant to learn more about the State Road Police Traffic Safety Work, management policy, activities, resources and results. After the delivery of the Workshop and Management course the proposed Capacity building program would be reviewed and if necessary revised regarding some issues.

The Draft Capacity Building Program for the State Road Police would be based on the following:

- The Traffic Law Enforcement chain, legislation-enforcement-sanction, should be analysed by the State Road Police, from a road safety point of view. When needed, changes in the legislation should be initiated effectively to increase road safety and decrease traffic accidents by developing the traffic legislation. Especially the level of fine should be benchmarked with respect to different road traffic violation and on available information of causes to traffic accidents. Countries with developed road traffic legislation based on the road safety focus should also be benchmarked.
- The State Road Police is one of the road safety stakeholders in Azerbaijan. The traffic enforcement activities are parts of the national road safety work which also should be based, among others, on information from the road traffic crash data base. The traffic enforcement activities should be data-led. On-line access to the information in the traffic crash database is important for all stakeholders.
- The traffic enforcement strategy should emphasise that the enforcement should be carried out with a strengthened general deterrence approach targeting high risk behaviour such as over speeding and non use of seat belts. The enforcement should be data-led and also focus on dangerous reckless driving, drink-and drug driving and commercial traffic violations. The enforcement of traffic flows should be analysed on monthly basis and, when possible, minimised.
- The State Road Police Vision/Strategy would be revised and coordinated with the National Road Safety Strategy.
- The training courses would focus on modern road policing; which mean visible and active police officers, modern hands-on and automatic equipment, mobile and stationary deterrence traffic enforcement activities, professional management supported by a Traffic Enforcement Management Data System. The proposed courses in the ToR are well selected as a starting point for capacity building of the State Road Police.
- The equipment needs to carry out the enforcement strategy in the first phase are both hands-on and more advance automatic equipment for speed enforcement, equipment

for drink- and drug driving enforcement, GPS equipment for location of traffic accident sites needed for the crash data system and a modern Traffic Enforcement Management Data System for Data-led enforcement. Especially an ATC System for speed enforcement, based on stationary and mobile cameras along the road net work, should be developed.

I. Introduction

1.1 General

The Technical Report 1 (TR 1) will be the basic theoretical background for the Capacity Building Program and the professional Development Program for the State Road Police. The topics in the report are based on international experiences, knowledge and best practises.

The TR 1 on Capacity Building is the strategic and operational base for the proposed draft training program containing the workshop, the Management course, the Trainers course and the Police officers course which finally will be developed in the Technical Report II (TR 2). TR 1 will also be the final proposal on equipment needs developed in the Technical Report 3 (TR 3). TR 2 and TR 3 will be presented at the end of December 2010.

The aim of Task 3 is to design and deliver a professional development program and transfer knowledge in order to enhance the enforcement skills of the State Road Police officers on all levels.

The main objectives are:

- Address the fundamentals of operational traffic policing
- Delivery of a strategic planning focus for senior police officers

Specific objectives are:

- Assess the equipment and materials needed by the State Road Police and prepare a schedule and specifications of agreed items to be purchased
- Assess the training needs of the State Road Police
- Development of a professional program and training curricula to meet these needs
- Deliver training for senior police officers and train instructors to provide training for Traffic police officers
- Set up monitoring and evaluation process to facilitate future improvements.

In most countries road policing seeks to ensure that all people can use the roads, go about their daily life and get around their towns safely and without being harmed or intimidated by unlawful and anti social behaviour on the road. This is particularly important for the elderly and the children.

The roads are part of the public space. Unlawful and unruly behaviour on the roads and by vehicles need to be challenged and lawful standards need to be asserted when they are on the streets and in other public space.

Road policing is therefore an important and visible element in the police's commitment to protect the public, to help maintain safe communities and civil society, and to support law abiding citizens' confidence in the law.

Road policing will usually focus on the following actions:

- Reducing road traffic casualties
- Enhancing public confidence and reassurance by patrolling the roads
- Denying criminals use of the roads by enforcing the law

In the Inception Report (IR) the Consultant has stated that the State Road Police needs a clear and determined change of focus regarding traffic enforcement, away from "enforcement of traffic flows" towards Data- led traffic enforcement of high-risk behaviours, such as over-speeding, reckless and dangerous driving, failure to wear seat belts, driving against red signals, failing to give way etc.

However, it is not so easy to completely change focus depending on the needs to develop the infrastructure and the management system of the road net work in Azerbaijan like in many other countries in order to minimise the traffic jams. The stakeholders seem to be professionally aware of the basic traffic flow problems and the general management of the traffic and the establishment of the principles for designing safe roads is a continuing process which is accelerating in Azerbaijan.

The Consultant intends to initiate that the State Road Police traffic enforcement in a near future will be carried out with a very visible and very active deterrence data-lead (intelligence led) traffic enforcement. The enforcement should targeting high-risk behaviours on the road network, should be well planned and coordinated with offensive use of Automatic Traffic Control (ATC) technique. It should be followed by efficient legal procedures to bring offenders quickly to justice. The Consultant also intends to initiate that the traffic enforcement campaigns are supported by publicity and awareness campaigns.

The outcomes of the identification of high risk behaviours on the Azerbaijan road network will be utilised as a background for the capacity building of the State Road Police and the education and training program for development.

However, some of the road users' high-risk behaviour is not acceptable at all and the State Road Police have to change the enforcement programs in order to get the road users to obey the traffic laws and regulations.

The most important parameters in intermediate safety outcomes are speed, seat belt usage and no use of alcohol and drugs when driving. Therefore the Consultant proposes that a special programme should be developed for continuing observations of high-risk safety behaviours. The collected and stored data will be used as background when developing State Road Police's operational strategy and tactics to address identified high-risk safety behaviours.

There is also a need to change the traffic legislation and improve traffic safety through the legislation. Especially the routines to bring the offenders to justice must be a quick and efficient process.

1.2 Road Safety Problems in the Azerbaijan

In the FinnRoad Report 2005 “Traffic Safety Policy & Plan” is presented a summary of the road safety problems in Azerbaijan which still is relevant in most aspects:

- The Azerbaijan has a high number of road traffic accidents and casualties
- Vehicle fleet is rapidly growing
- High risk of accidents in coming years due to new drivers
- The number of persons killed in relation to the number of motor vehicles is high
- Major risk groups consist of passengers and pedestrians
- Constitute a major problem for the health of people and from an economic point of view
- Drivers often ignore pedestrians
- Pedestrian often have to walk on carriageway and on streets
- The use of seat belts is very low
- Traffic safety for children is not sufficiently considered
- Driver’s adjustment of speed to prevailing circumstances is not satisfactory
- The use of helmets by motorcyclists is low
- Young drivers constitute a high risk in traffic
- Driving under the influence of alcohol is frequent
- Road users show to little consideration and understanding of other road users need
- Road users get too little support and guidance from signs and markings
- The driving habits are rather aggressive
- There is not sufficient seat belt in all vehicles
- Pedestrians do not use retro-reflective devices at night
- The road and street environment should be more “forgiving”
- Qualified emergency services are very limited outside the major cities.

During the inception phase, the driver behaviour on the road network and some of the State Road Police operational enforcement activities have been observed to use as a background in the development program concerning the improvement of the State Road Police.

These observations included:

- Observations of the visible presence and activities of State Road Police on the road network

- High risk behaviours due to over-speeding, driving with too short distance between vehicles, not wearing seat belts, dangerous overtaking, reckless driving, pedestrians close to moving traffic, aggressive driving, etc.
- Roadside inspections show vehicle without registration plates or damage plates, worn tires, damaged cars with dangerous parts etc.
- Commercial traffic with overloaded trucks, not safely loaded, overloaded buses and deficiencies regarding installation of seat belts in taxis
- Dangerous goods transports with certification plates not in accordance with the ADR regulations and technical unsafe vehicles being used for these transports.

High-risk behaviour is very obvious on the road network in Azerbaijan and traffic crashes are reportedly on a high level in relation to the size of the vehicle fleet. A particular observation is that over-speeding, reckless driving and overtaking is very apparent on the roads, which are serious high-risk behaviours directly related to crash risks and also causes serious traffic accidents. It is remarkable to which extent the car drivers do not obey the safety belt regulations.

1.3 Causes to traffic accident

In the FinnRoad Report 2005 “Traffic Safety Policy & Plan” FinnRoad has outlined the main causes to traffic accidents Azerbaijan:

“Many drivers use the improvements in the traffic system to drive faster without increasing safety and they are making traffic more dangerous for other road users”.

The risk of being injured or killed for the vulnerable road user group (children, adult pedestrians, cyclists) is increasing because *“far too many road users behave badly in traffic and show too little consideration and understanding to other road user”.*

“Available accident data show that over 50% of the accidents reported by the police are related to high speed or overtaking or similar speeding action.

There is also the problem that drivers are not prepared for possible risks or changes in the traffic situation. On the contrary, they rush on even to a congested area expecting that others go away. Even a small mechanical failure may cause a major accident when a car stops while trying to accelerate, or brakes do not function in full power”.

The highlighted causes are typical unsafe behaviour.

Among others FinnRoad also ascertain that road users are not aware of the fact that seat belts are the most important life savers in the car. The Consultant has noticed that the Police officers on the road level pay very little attention to the use of seat belts.

FinnRoad also has reported and submitted: *“Driving under influence of alcohol and other drugs is a problem, which cannot be ignored. International studies show that there is a very clear connection between drunk driving and greater risk for road accidents”*.

The Consultant agrees with FinnRoad.

During year 2009 there were 2792 traffic accidents; 930 fatalities and 3044 injured people.

43.5 percent of the recorded traffic accidents were caused by over speeding and 24.3 percent were caused by violation of over passing rules during year 2009.

1.4 The fines level

Benchmarking between the fines for high-risk behaviour in the Azerbaijan, the Swedish and the Iranian Road Traffic legislation is presented in the following. For example Sweden has at least during 50 years consequently changed its traffic legislation and improved road safety through the legislation

Table 1: Benchmarking; Level of fines Azerbaijan and Sweden calculated in Manats:

(Note that 90 Manats is approximately 100 SEK.)

<u>Violation/Crime</u>	<u>Azerbaijan</u>	<u>Sweden</u>
Dangerous and reckless driving	20-60	450-1350 1)
Drink driving	80-400	450-1350 1)
Drug driving	80-400	450-1350 1)
Driving without license	40-180	450-1350 1)
Speeding, no accident, Limit >50 km/h	20-60	180-360 2)
Red light driving	20-40	270 3)
Non-use of seatbelt; car driver	15-20	135
-“- ; car passenger	No fines	135
Non-use of helmet motorcycle driver	20-40	135
-“- motorcycle passenger	No fines	135
Driving a car without number plate	40-60	135
Commercial drivers; driving time	10-160	270

Comments:

- 1) Serious traffic violation, defined as a crime in Sweden and punishment by a law. The special fine, depending on the income, is equivalent to 450-1350 Manats. Driving license withdrawal at least one month, prison when serious and/or repeated
- 2) Driving license withdrawal immediately, usually one month if >30 km/hour
- 3) Driving license withdrawal immediately, usually one month

The fines level in the present traffic legislation in Azerbaijan is low. The sanctions in common seem not to be coordinated with the road safety factors. Notice that the cost for a lunch and dinner are quite equivalent in Azerbaijan and Sweden.

2 Assessment of the State Road Police traffic enforcement

2.1 General

In July 2010 the Word Bank Staff and the Consultant met the Head of the State Road Police Major General Ramiz Zeynalov and Colonel Rafig Quasunov at the Traffic Police Headquarter for information exchange on Azerbaijan Road Safety Program, among other topics in the ToR Task 3.

Some of the scope and deliverables in accordance with the ToR Task 3 will include:

Activity 1:

“In close consultation with government and road police representatives the consultant will review road safety problems and traffic law enforcement needs in Azerbaijan. The consultant will review current road police policy, procedures and equipment regarding its duties with respect to road safety and traffic law enforcement and prepare a report of this review.

The report will cover, but not be limited to:

Road safety problems, the role of Azeri road police and its approach to addressing those problems;

*Current operational procedures of the police with respect to traffic law enforcement;
Recommendations for any changes in policy and procedures with respect to traffic law enforcement, with the aim of improved road safety;*

Current equipment and materials available for road traffic law enforcement and an assessment of future needs.

An assessment of training needs for the Azeri road police;”

In order to assess the current operational procedures, equipment and training programs to use as background for the Consultant assessment of the State Road Police traffic enforcement the Consultant has asked for information by a letter to the Head of the State Road Police, enclosed by three forms for information exchange, **see Appendix 1.**

The requested information on the forms should also be used as background for the task to develop the capacity building program, which also is an activity in accordance with the ToR.

However, the information requested are available at the State Road Police Headquarter but not yet transferred to the Consultant depending on some security factors which should be analysed before a decision could be feasible to transfer requested information to the Consultant.

The main area of police activities stipulated in the Police Law are the protection of public order and public security, the prevention of crimes and other offenses and to ensure traffic safety.

The assessment of the State Road Police has been focused on:

- The current strategy used (The National leadership, National strategy/vision, co-operation between Road Safety authorities)
- The current data-led enforcement (intelligence governed traffic enforcement)
- The deployment of traffic police activities
- The number of reported traffic violation (active police officers, zero-tolerance)
- The current police enforcement training courses
- The current equipment used.

2.2 The current State Road Police strategy

The State Road Police duties regarding traffic enforcement is stipulated by the Police Law but could also be stipulated in a Decrees, Orders, and Decisions by the Cabinet of Ministers and Command.

The Head of the State road Police Major General Zeynalov has in a speech told that “State Road Police always made special attention to improvement of the traffic system, as well as provision of traffic safety, protection of lives and health of people from adverse impact of the vehicles”.

The strategy is not formulized but the vision can be very draft formulated like this based on information exchange with Colonel Rafiq Quasunov:

“In order to decrease the number of traffic accidents, increase the road user’s willingness to obey the traffic rules and to get road users to feel confidence with the traffic system the enforcement should be visible and active and encouraging the road users compliance with the law. The traffic legislation should be revised when needed”.

The approach is:

- By stationary and mobile enforcement take action when road users do not obey the traffic legislation
- On stationary checkpoints along the road network increase the general deterrence effect by very preventive and visible enforcement activities in order to influence the road users to obey the traffic legislation
- By visible mobile enforcement carry out preventive and reactive enforcement activities on time and place along the road net work
- When ordered carry out escort activities and when needed participate to organise the traffic flows by directing traffic police officers.

2.4 The current data-led enforcement

The State Road Police are responsible for the traffic crash data base system, see Technical Report Task 2. The available information regarding time, place and some limited information on causes for traffic accidents are computerized and available for some analysis and planning. The information on traffic accidents should govern the traffic enforcement on national and regional level. So far there is a limited data-led enforcement carried out by the State Road Police based on information on traffic accidents

However, the database on traffic accidents is not connected to any Traffic Enforcement Management Data System.

The information collection, storing etc regarding number of violations, enforcement activities, working methods, working hours on black spot locations etc is not efficient computerized and available for analysis and planning on-line by Traffic Police Chiefs on different organizational levels.

2.4 Deployment of activities year 2009

The Consultant has requested information; see Appendix 1 Form 3, regarding the deployment of activities but on reason explained above not yet received any information.

Therefore the consultant in this Draft Technical Report 1 Task 3 will make a preliminary analyse on the present deployment of activities:

Observations indicate that the traffic police officers mainly are working in four activities:

- Traffic flow enforcement (managing the traffic, escorts etc)
- Traditional mobile enforcement by patrol cars
- Stationary enforcement on stationary roadside checkpoints
- Automated Traffic Control by cameras of road users' behaviours on streets in Baku.

Speed enforcement activities are carried out but seem to be in rather small extent.

Enforcement actions regarding non use of seat belts seems also to be carried out in small extent.

The activities on the near 30 stationary roadside checkpoints are very important when carrying out preventive and reactive actions.

2.5 Reported road traffic violations year 2009

The Consultant has requested information; see Appendix 1 Form 2, regarding the deployment of activities but on reason explained in section 2.1 above the consultant has not yet received any information. In the Final Technical Report 1 the information on reported traffic violations hopefully should be completed:

The Consultant needs information on number of following violation to use as background when finalizing the capacity building program.

- Reported violations
- Speed violations
- Vehicle defects
- Non use of seat belts
- Red light driving
- Reckless and dangerous driving
- Reckless overtaking (if possible)
- Drink driving
- Drug driving
- Commercial traffic violations (total if possible)

The following information is at present available for year 2009:

The total reported violations during 2009 are more than 884.000, including drink driving; more than 20.000, over speeding 138.000 and 13.000 regarding over passing rules. The driving right was limited for 3062 drivers.

2.6 The current traffic police training courses

In Azerbaijan Road Safety Program the Consultant shall carry out an assessment of training needs for the State Road Police and assess present training courses. The Consultant has asked the representative for the Police School the following

- 1) Contents of the basic traffic police training?
- 2) Special courses regarding use of traffic enforcement equipment?
- 3) Special traffic enforcement trainers and Management courses?
- 4) Special analysis and planning courses?

The consultant has received information that no special traffic enforcement training courses is carried out by the Police School regarding addressed traffic police training.

Colonel Rafig Zeynalov has informed the Consultant that the State Road Police are carrying out special traffic enforcement training courses but there are always needs to develop the theoretical and practical training.

Among others, the State Road Police carries out the following courses:

- Traffic enforcement methods
- The use of traffic enforcement equipment
- The analysis and planning of traffic enforcement
- Management of traffic enforcement

2.7 The current State Road Police resources and equipment

The Consultant has requested information; see Appendix 1 Form 1, regarding the current resources and equipment but on reason explained in section 2.1 above the Consultant has not yet received any information. In the Final Technical Report 1 the information on reported traffic violations hopefully should be completed:

The Consultant has preliminary estimated the following needs of equipment for professional and efficient road traffic policing:

- 1) Traffic Enforcement Management Data System
- 2) GPS devices
- 3) Automatic fixed speed cameras
- 4) Automatic mobile speed cameras
- 5) Automatic Traffic enforcement cameras
- 6) Handheld laser instrument
- 7) Radar/laser/video installed in cars
- 8) Alcohol screening instruments
- 9) Alcohol evidence instruments
- 10) Drug test devices
- 11) GPS devices
- 12) First Aid kits

The information needs should be finalized in the TR 3. The numbers, manufacturers etc will be presented in detail and a phased plan for investment shall be developed.

3 International experiences and good practices as background for the Capacity Building Program for the State road Police

3.1 General

One of the main objectives in Task 3 is to address of the fundamentals of operational Traffic Policing. The Consultant gives priority to transfer following international experiences and good practises.

The most common international methods for Traffic enforcements are known by the Central leadership of the State Road police in Azerbaijan. Some of them are already put into practise. However, there are no needs and probably some difficulties at present to introduce in Azerbaijan the most advanced international ATC Systems.

In the European Union countries stakeholders, systematically use experiences from the Traffic enforcement actions and the results from research when developing strategies on Traffic Enforcement. The recommendations from the European Commission on the Traffic Enforcement in the field of Road Safety are based on such experiences of “best practise” from police officers, working on-the-road-level, and results from road safety and traffic enforcement research.

In the European strategy, the recommendation is to increase the stationary enforcement methods, with priority given to enforcement of over-speeding (with ATC Systems and traditional equipment), drink- and drug driving, non-use seat belts/helmets and violations in commercial traffic such as overloading, violation of the regulations concerning driving and resting time, cross-border traffic etc. To carry out such recommendations as in Europe the State Road Police needs more advanced and modern equipment.

International experience shows that a National Traffic enforcement organisation (such as the State Road Police), has to clearly state the priorities and Traffic enforcement working methods. When this has been agreed, further decisions can be taken concerning the equipment. If decisions concerning equipment are taken before decisions on priorities and methods, the decision concerning equipment will govern the working methods. Such development will only favour the sellers of enforcement equipment and will lead to inefficient use of the police resources.

In this chapter regarding international experiences and good practises the Consultant present below following selection of important traffic enforcement issues which could be useful to

take into consideration when discussing different aspects of the capacity building of State Road Police.

These issues are the background to the proposals in chapter 4 regarding models for capacity building, the development program and equipment needs:

- Theoretical discussion on Traffic Law Enforcement
- The Traffic Enforcement procedures
- The General and Specific Deterrence Traffic enforcement concepts
- Addressed Traffic enforcement
- Data-led Modern Road policing
- Strategic analysis and planning
- Operational analysis and planning
- Traffic Enforcement of commercial traffic
- Some comments on Traffic Police Training courses
- Some comments on Modern Traffic Enforcement equipment

3.2 Theoretical discussion on Traffic Law Enforcement

The Road Traffic laws and regulations (Traffic legislation) in Azerbaijan and their adequacy, the legal aspects on road crashes and the Police enforcement of the Traffic legislation, including financial fines for violation, are important to study and develop. The purpose of most of the Traffic legislation is to influence the behaviour of the road users and to change their behaviour in way that is favourable to the road safety and to the society.

There are some international aspects to observe when developing the National Traffic legislation. As traffic is international in its character, it was realized at an early stage that international co-operation was necessary. Over time, a number of international instruments were developed. The 1968 Vienna Convention (the Convention on Road Traffic and the Convention on Road Traffic Signs and Signals), is for example adopted by most countries in the world. Azerbaijan adopted the Vienna convention year 2002.

Apart from these conventions there are also a number of international agreements which are of interest. The most interesting of these agreements concern vehicle standards and equipment.

Road Traffic legislation is a basic tool for preventing road crashes and reducing fatalities and injuries and to resolve and minimize conflicts among the road users. The pre-conditions are that the road users must know and understand the rules, the rules must be supported by the majority of the road users and the rules must be enforced.

To enforce a rule means that one has to find the offenders and bring them to justice. This process must be efficient and fast since, if a number of rules are disregarded and the risk of apprehension is small, it will inevitably diminish the respect for rules as a whole and will ultimately destroy the morals of the road users. As an example the Consultant has noticed that very many car drivers in Azerbaijan obey to use the seat belt.

The consequences of breaking rules may vary from fines to imprisonment etc. However, there are other consequences of breaking the rules in traffic that might to be more powerful and deterrent than traditional punishment, for example, the sanction revocation of the driving license.

As a background to further discussions concerning some rules in the Traffic legislation in Azerbaijan we have to, from a theoretical point of view, discuss the conception “Traffic Law Enforcement”.

Traffic Law Enforcement consists of three elements, which are

- Legislation regarding road users behaviour and acting in traffic
- Road Traffic policing
- Legal Sanctions.

All these three elements play essential roles in determining the impact and effective use of a Traffic Law Enforcement system. The Traffic Law Enforcement system covers the entire chain, from legislation to detection of a violation to the penalty. The “Road policing” forms the link between the other two components of the system and refers to the actual work of detecting a traffic law violation, apprehending the offender, and securing the evidence needed for the prosecution or penalty.

Legislation plays an important role in determining the impact and effectiveness of the Traffic Law Enforcement system. However, the legislation alone is unable to bring about sufficient changes in the level of unsafe road users, hence reliance is typically placed on the Traffic Police, even other Police officers, to detect, apprehend offenders and to initialize punishment of punishable behaviour.

Road Traffic policing (traffic surveillance, traffic supervision) and the activities associated such as the reporting procedures and the sanctions are the most visible and interactive aspects of the Traffic Law enforcement system and can often form the basis of public opinion regarding Traffic Law enforcement. The influence that such activities can have in shaping public perception is considered to be an important element in the process of moderating road user behaviour and further highlight the central role of the Traffic Law Enforcement system.

Traffic Police activities, henceforth called Traffic enforcement in this chapter, and should primarily serve as deterrence for drivers inclined to commit traffic offences through increasing road user's perception of the risk to be apprehended.

In the short term, Traffic enforcement has an impact on behaviour as a direct result of the road user encountering some form of enforcement activity. In the longer term Traffic enforcement can facilitate a more generalized social process of attitudinal change due to a greater community awareness of underlying need for and objectives of Traffic enforcement.

The element Legal sanctions usually consist of financial penalties. Financial penalties require violators to pay a sum of money as a consequence of violation of the Traffic legislation. There is an increasing use of "fixed" penalties for non-serious road traffic offenders. This helps keep enforcement processes manageable and limits the workloads at courts.

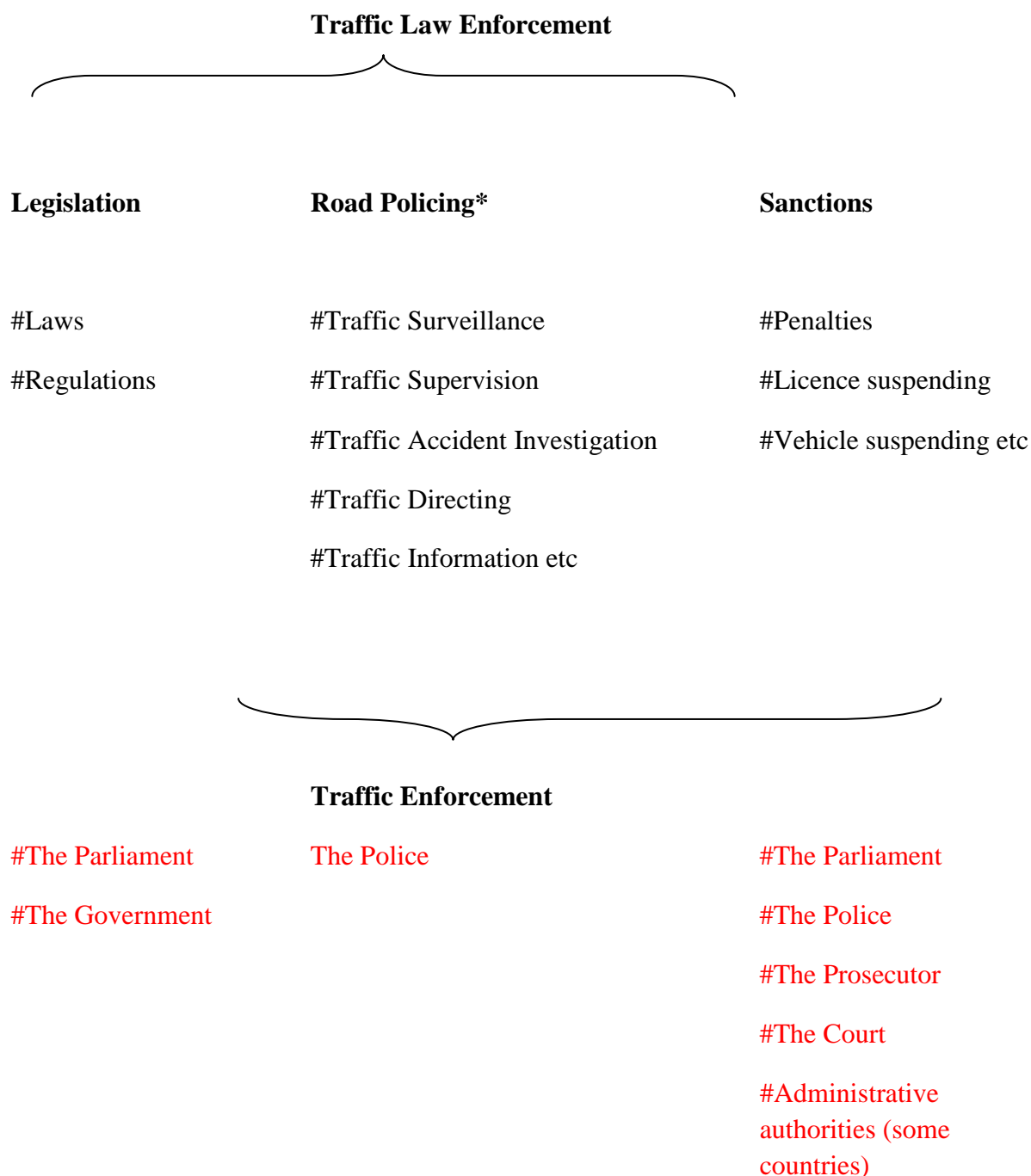
However, beside financial penalties, there is a wide range of non-financial penalties in the field of Road Traffic enforcement for example:

- Disqualification from driving and driving license withdrawal
- Points related penalties (de-merit points)
- Disqualification from operating a vehicle
- Training and rehabilitation courses
- Community service
- Vehicle confiscation
- Immobilisation of vehicle

As mentioned above the most common type of traffic violation penalty is the use of fixed fines. The use of this type of sanction has been shown to have an impact on the level of illegal road user behaviour. One problem can be that the fines are usually quite low in relative terms and may convey a message to road users that a certain level of over-speeding is affordable. Another problem is that fixed fines place different financial burdens on different categories of offending road users.

In the FinnRoad Report is proposed that the penalty system should be checked and up-dated to meet a reasonable level meaning not too heavy fines and yet effective. Two solutions are discussed in the FinnRoad Report; differentiation of the fines by income and differentiate the penalty according to the grade of violation. The Consultant will later in this report make some comments on FinnRoad's proposals.

If awareness of Traffic enforcement and Legal sanctions is strong, the temptation to gain advantages by breaking the rules will be reduced. The amount of this reduction will depend on the perceived risk of being caught and the consequences that will follow. Concerning the importance of bringing traffic offenders to justice by a quick and efficient process see section 4.1.2 The Traffic enforcement procedures.



Picture 1: Traffic Law Enforcement elements and responsible bodies

3.3 Traffic enforcement procedures

Declaration of the penalty for an infringement of the road legislation is one step in the Traffic enforcement procedure, which is based on the following common international administrative pattern:

- Registering the offence
- Identifying the owner or the driver
- Establishing the offence
- Sending the penalty notice
- Execution of the sanction

The traffic enforcement procedures should recurrently be analysed in order to develop more efficient working procedures for traffic police officers on road.

Registering of the offence:

Generally there are two basic ways to record offences to traffic legislation; either the offence is registered by stopping the vehicle and performing checks on the vehicle's occupants; the driver for driver license and drugs, all the occupants for wearing seat belts.

Traffic enforcement is carried out on the spot, or a ticket is issued directly to the offender and the offence is registered by the Police officer. Alternatively the offence is registered by an automatic device. This is the case for speeding, which is measured by stationary or mobile automatic equipment (ATC) and increasingly also for not wearing seat-belts. In countries where automatic recording of offences is most advanced, Traffic enforcement typically goes through the following steps.

Identifying the owner or driver:

For offences registered automatically, the issue of identifying the owner and/or the driver arises. If the car is not registered in the country where the offence has been recorded, information on vehicle registration (license plate number) has to be transmitted to the authorities in charge of the vehicle registration database in the country where the vehicle is registered. These authorities will then send back personal information on the car owner (name and address) to the authorities of the country where the offence has been committed.

For this transmission to work, data related to the committed offence, license plate number, date, place and type of offence, have to be first encrypted and then directly transmitted to a processing centre. Data can also be saved and stored by recording equipment (laser, camera, Tachograph). In this case, data is downloaded from the recording equipment and transmitted to the processing centre by standard equipment operated by Traffic enforcement units in charge of carrying out the duties concerned.

In order to exchange information on vehicles and violation of traffic legislation in an efficient way a communication system is needed when carrying out cross border enforcement.

Establishing on offence:

Once all relevant details about the type of offence, the ownership of the car, and the vehicle registration have been collected, police authorities will establish that on offence has been

committed and describe the specific infringement of the Traffic legislation. Concerning offences, which do not require the driver to be stopped as in the case of automated speed enforcement, the offences may be established through electronic methods, including an electronic signature. Homologation of enforcement equipment, which guarantees that the equipment meets the technical requirements according to the type approval regulations, is necessary for establishing, through electronic methods, that an offence has been committed.

Sending the penalty notice:

After it has been established that an offence has been committed, a penalty notification is issued and sent to the car owner or driver of the vehicle with which the offence has been committed.

Execution of the sanction:

Finally, the fine will have to be paid and any other sanction executed. There are different rules concerning the person who needs to pay the fine.

In countries where the driver is liable for paying the fine, drivers must be identified, and in some of these countries a photo of the driver is required for this purpose. In other countries, where the car owner is liable, a photo of the license plate number is sufficient to start sanction procedures.

Some countries have a very simple system; the car owners are liable and have to pay the fine, regardless of whether they were driving or not when the offence was committed. This is the case in, for example, the Netherlands where notifications of offences are sent to the car owners and they are required to pay the fine, without any need to identify the driver. Sweden sends penalty notices to the car owners with the request that they name the driver. When they do not name the driver, the Police start an investigation and try to find the driver.

3.4 The General and Specific Deterrence Traffic enforcement theories

It is generally accepted that Traffic Law enforcement influences driving behaviour through two processes; general deterrence and specific deterrence.

General deterrence can be defined as the impact of the threat of the legal punishment on the public at large.

Specific deterrence can be seen as the impact of the actual legal punishment of those who are apprehended, see Figure 2.

Thus, general deterrence results from the perception of the public that traffic laws are enforced and that there is a risk of detection and punishment when traffic laws are violated. Specific deterrence results from actual experiences with detection, prosecution, and punishment of offenders.

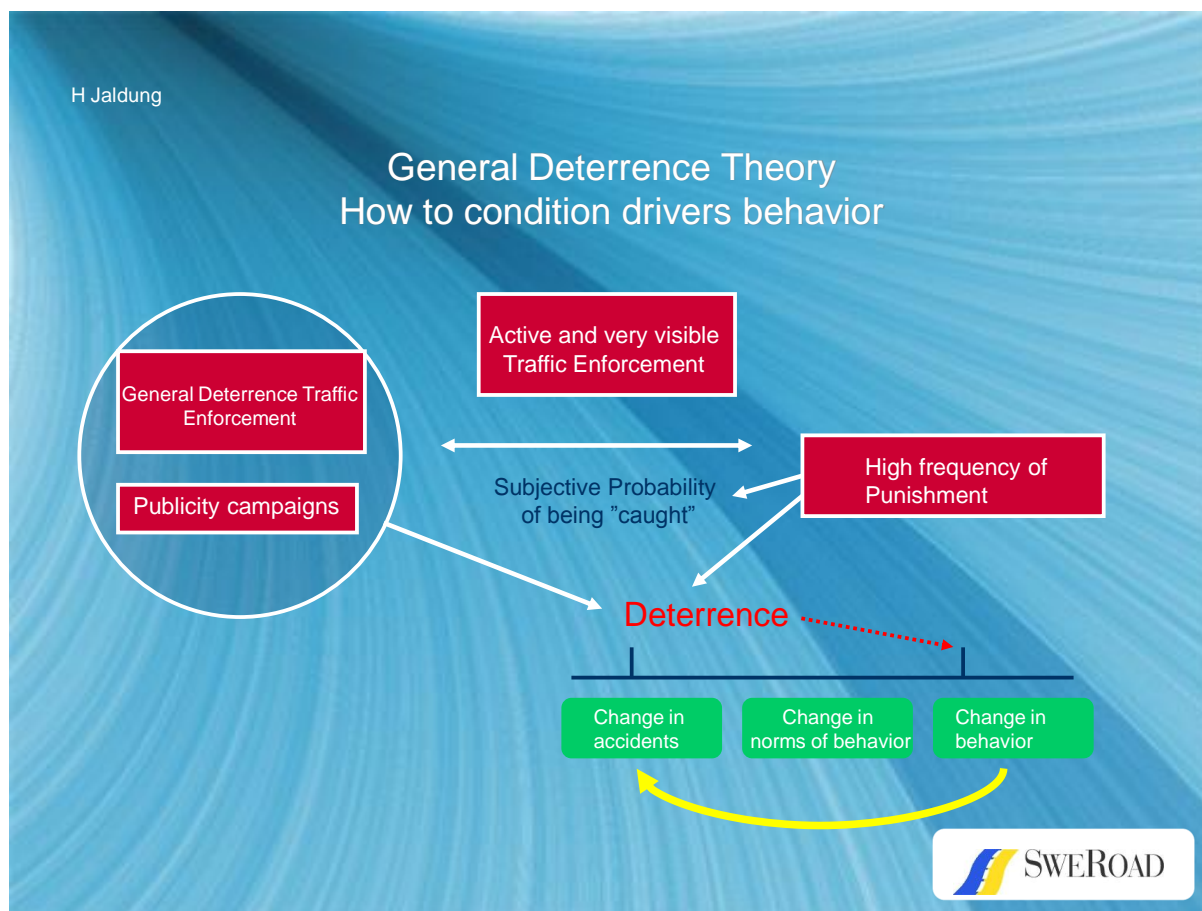


Figure 1: The General Deterrence Theory

The general assumption underlying Traffic enforcements is that it should primarily aim at general deterrence, which is first and foremost achieved by increasing the subjective risk of apprehension. The subjective risk of apprehension, and hence the effectiveness of road policing will be bigger if the Traffic enforcement is:

1. Accompanied by publicity
2. Unpredictable and difficult to avoid
3. A mix of highly visible and less visible activities
4. Primarily focused on times and locations with high violation (maximum feedback to potential offenders)
5. Continued over a longer period of time

These general principles may need further rayon-specific tailoring to account for regional differences with regard to violation levels, the road status, and perhaps even social norms in the Rayon's of Azerbaijan (research has shown regional differences in effectiveness of Traffic enforcement in some countries).

Some common international Traffic enforcement principles are important to observe as a background when we discuss the possibility for the State Road Police in Azerbaijan to make

the Traffic enforcement more effective in order to improve road safety by general deterrence targeting high-risk safety behaviours, improve the drivers' behaviour in traffic, decrease the traffic accidents and enhance the citizens' trust in the traffic system. Some of these common International Traffic Enforcement principles are:

- Rules should address inappropriate behaviour
- Drivers must know the rules and perceive them as reasonable
- Rules are indispensable since the drivers cannot be expected to learn about risks from their own experience
- Rules must be enforced
- Only rules that are possible to enforce should be enacted
- The Police are to co-operate with other authorities and organizations in matters concerning road safety
- The Police are responsible for road policing
- The efforts of the Police in this area should be focused on traffic offences which are known to be the major causes of fatal and serious injury crashes
- On the basis of the National Traffic enforcement strategy, the provincial Traffic Police should set up their own tactical goals and draw up their own operational road policing plan based on local conditions
- Traffic enforcement should be focused on those areas for which the Police are responsible, i.e. traffic violations punishable under the Traffic legislation, and should be carried out in a consistent manner that creates respect for and understanding of Traffic regulations among road users
- Traffic enforcement should be based on facts and carried out in a problem and goal oriented manner
- Priorities set against high-risk behaviours should be developed as strategies
- The need to secure traffic intelligence in line with the strategies is fundamental
- All information, both strategic and tactical, that may impact on decision making, should be clearly outlined.

The following questions are basic issues concerning traffic surveillance methods:

- Which approach should be used for the Road policing activities to be an effective and active part of the traffic safety efforts in Azerbaijan?
- Which Traffic enforcement methods and techniques are allowed by the Traffic legislation in Azerbaijan?
- Which Traffic enforcement methods and techniques should be used by the State Road Police in Azerbaijan?
- Which equipment is needed for these Traffic enforcement methods?
- Is new legislation needed to apply some internationally recognised Traffic enforcement methods?

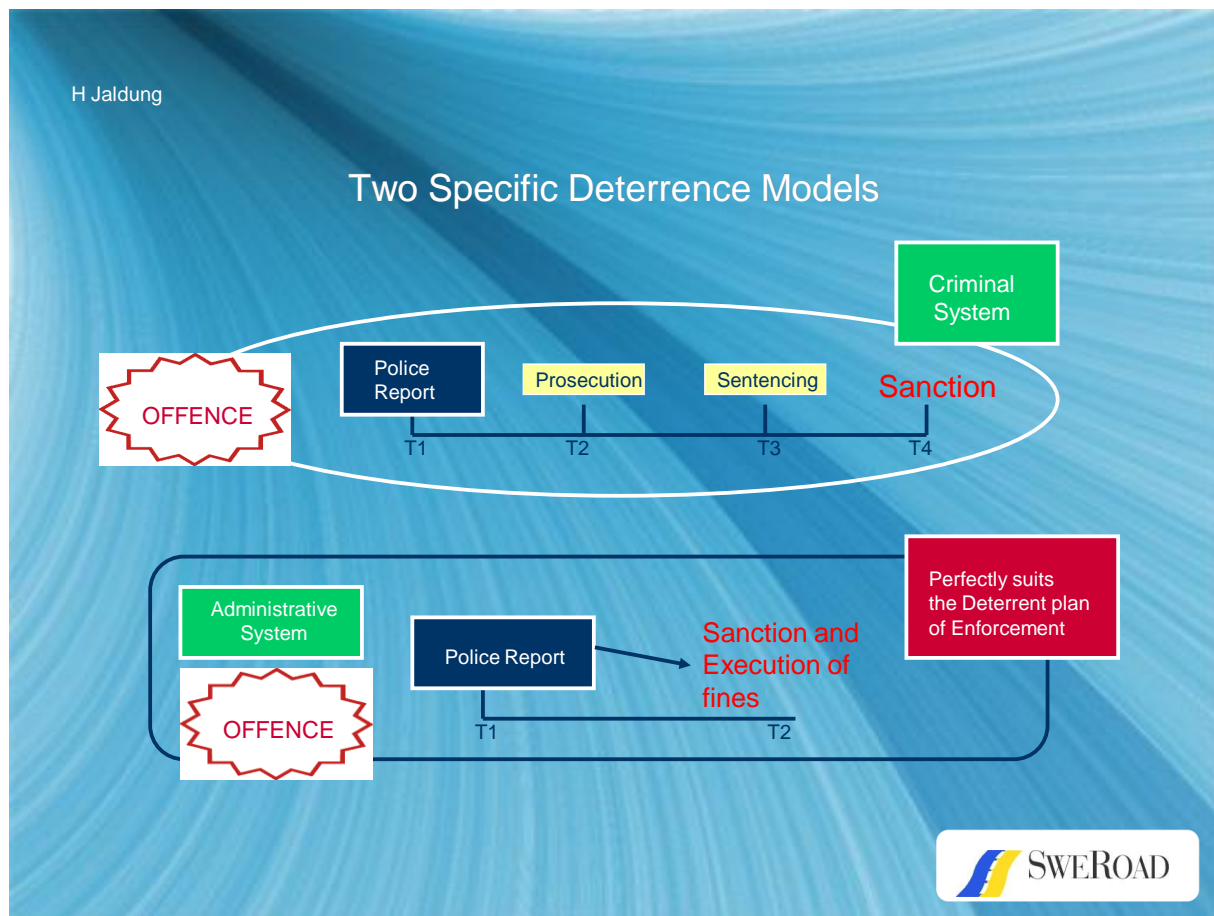


Figure 2: *The Specific Deterrence Theory – two models*

3.5 Addressed Traffic enforcement

Traffic enforcement targeted at a limited number of high-risk violations is more effective in reducing road crashes than non-targeted general enforcement. There are various reasons for this from a) organizational, b) road safety, and c) communication points of view:

a) Given the limited amount of Police officers and enforcement equipment, the Traffic Police chiefs on different levels will always aim to get maximum effect from scarce resources. Focusing on a limited number of high-risk violations is more efficient than non-focused general enforcement approach.

b) Focusing on one or more high-risk violations such as speeding, seat belt, reckless driving and violations against the rules concerning driving and resting times for commercial traffic is also justifiable given the scientific evidence of the relationship between these violations and road safety risks.

c) It is easier to communicate to road user's information about a limited and specific number of violations than about traffic violations in general.

3.6 Data- led modern road policing

In the FinnRoad Report 2005 “Traffic Safety Policy & Plan” it is well accentuated that

“efficient data and information management, including use of accident data and other relevant data, are important prerequisites for the work to identify safety problems, to categorise them and quantify them. Follow-up and evaluation also depend on reliable data.

Data, not only about traffic accidents, but also about traffic, roads and streets, driving licences and vehicles, are of vital importance for successful and efficient traffic safety efforts. Moreover, data about law enforcement, emergency services, injuries and hospital care, weather conditions and travel habits are valuable”.

The State Road Police would change its focus from directing traffic, illegal parking or other duties concerning traffic flow, to focus on enforcement of dangerous traffic law violations, such violations which are defined as high-risk behaviours.

Law offences should be chosen and prioritised in the State Road Police Enforcement strategy as the background to scheduled enforcement operations.

The State Road Police Staff has several functions. This Staff should sanction the deployment of resources and avoid excessive responses to random events. Too purely reactive approach regarding Traffic enforcement results in a loss of focus. By remaining focussed, an organisation can be more effective at tackling the issues affecting it, with proper assessment and analysis, however brief.

The management of such an information system is called Data Led Traffic policing or Intelligence Led Traffic policing, here in this report henceforth called Data-led policing.

Data-led policing can essentially be summarized as $\text{Data} + \text{Analysis} = \text{Intelligence}$.

Data-led policing is the application of intelligence analysis to assist as an objective decision-making tool in order to facilitate a reduction in offending and increase prevention through effective policing strategies.

Intelligence is also a process, incorporating a continuous cycle of activities, data collection, collation, analysis, dissemination a feedback, and prior to the next operational deployment. This continuous process is responsible for the generation of an intelligence product which is designed for decision-makers.

The Data-led policing ought to be concentrated on five elements:

- Targeting offenders

- The management of hotspots
- The investigation of complaints from and response from the public including working with local partnerships to reduce incidents
- The strategic integration of all campaign components

The main demand concerning Traffic Police data collection ought to be that data should be easily accessible for both for the Central Staff and the Regional Staffs of the Road State Police in the Rayons. Some data ought to be accessible also for other Road Safety organizations for example data regarding traffic accidents, reported violations etc.

It is important to identify the “hotspot” where violation and crashes are occurring to quantify the nature of the existing violation.

A black section can be of any length of road and should not be limited to a particular distance or road type. A black section should be an area of road where accidents and casualties are occurring and violations are on a high level.

The black section can be identified through the following:

- Analysis of traffic accidents and violations data
- Observations and measurement by the Traffic Police officers
- Complaints from the public, local authorities or business as the Traffic operators.

The information needs for Data-led enforcement are presented in the two following chapters; Strategic analysis and planning and Operational analysis and planning.

Remark: During the ARSP some baseline studies have to be carried out to use as the background for planned surveillance actions on the use of seat belts and over speeding. The State Road Police will carry out these baseline studies from year 2011. The systematic approach of the baseline studies will be discussed and planned during the Management course for high-ranked Police officers.

3.7 Strategic analysis and planning

On yearly basis the Traffic police in most countries put together and present in the Annual Plan basic information concerning numbers of Traffic accidents, causes to Traffic accidents and reported traffic violations etc.

It is vital to the effectiveness of Data-led modern road policing to analyse the data. Such analyses will also help to identify the primary traffic enforcement target. The following sources of data should be analysed and examined:

- Traffic accidents statistics over at least the previous three to five years and the causes to Traffic accidents
- Road type – a comparison of corridors by crash risk allows a priority list to be developed
- Traffic volumes and speeds (time, day, date) –provides a rough estimate of relative risk which can be used to prioritize routes
- Driver and pedestrian information (age, gender)
- Vehicle statistics (vehicle type, load)
- Results of surveys by the Traffic Police or local authority on traffic safety missues
- Data from hospital records an put the problem into human terms
- Data from insurance companies provide average severity cost by fatality, injury and property damage
- Traffic violation and high risk behaviour data by location
- Traffic enforcement deployments by location.
 - Speed problems
 - Traffic Police personnel resources
 - Traffic Police Activities
 - Traffic Police Working methods
 - Plans for campaigns
 - Reported violations
 - Available equipment etc

3.8 Operational analysis and planning

On monthly basis operational analysis and planning are usually in most countries carried out on both central and regional level of the Traffic Police.

Some best practise has shown the benefits of creating a permanent employment of Data Analyst within the Traffic policing area. The Data Analyst would be responsible for undertaking analysis of all available data and determining local activities. Data would be provided to the participating Traffic Police units on a regular basis to enable them to assess

their progress and revise their deployments as new information becomes available. In some parts it could be a secured web based system that provides updates on monthly basis.

From the analysis, determine the times, days and month when violations are occurring to help develop the deployment strategy. For a deployment strategy to be effective it is necessary to ensure that police resources are deployed:

- At right time
- At right place
- Carrying out the right type of traffic enforcement activities
- Strategically but not predictable by the public (any time anywhere)
- Utilizing adequately equipped and trained Traffic Police officers
- With sufficient intensity, usually three times per week.

To sum up the Traffic Police operation should, when carrying out Traffic enforcement in accordance with the principle “Data Led traffic enforcement”, be targeted to accident prone sites and to those hours of the day when highest risk of traffic accident.

The Traffic Police officers should be deployed to the correct location at correct times consistent with the analysis completed previously. The tactical allocation of the Traffic Police officers is an important part of Data-led policing and should contain at least following information:

- Traffic police officers information
- Type of enforcement activities
- Times, days, date and specific location and direction of enforcement (start and finish times to be recorded)
- Type of equipment to be used (speed camera, alcohol devises etc)
- Number of violations detected
- Number of violation reported
- Sanctions
- Other information (driver and vehicle details)

When the specific enforcement sites have been identified, a deployment strategy should specify the times and locations where the Traffic Police officers should be carrying out enforcement activity. In addition a corridor strategy should also be developed. A corridor

strategy is identified by analysing the routes where accident and casualties are occurring. This is in addition to hotspot along the route. These routes will be given additional police patrols at specific time periods to prevent accidents and casualties and detect traffic violation.

The result of each shift is important information since the effectiveness of the deployment strategy will be realized over time. Although the allocations may be prescribed by previous best practise each community and location is different and some fine tuning may be necessary. Keeping accurate records of deployments allows this outcome to occur.

Identify the specific high crash locations where enforcement is to be effected, ensuring public and officer safety is considered at the hotspot chosen.

Having selected the site for enforcement, reconnoitre the area to find the best point from which enforcement is to be carried out. In selecting the enforcement position, account should be taken of the following circumstances:

- Strategically integrating with any automated enforcement deployments to avoid any legal or public perception issues
- Safety of the police officers and the public – police officers should be equipped with high conspicuity clothing
- A clear and unobstructed view of the vehicle being targeted
- A suitable area to stop vehicle safely, if the police wish to deal with driver in the scene
- If operating during the hours of darkness, an area with sufficient lighting should be selected
- Sometimes it may be necessary to revise shift schedules and officers allocations in order to meet the demands of the targeted enforcement plan.
- Determine baseline measures for crashes, enforcement outcomes, enforcement deployments and driving behaviour measurements (i.e. speed) prior to commencement of targeted enforcement. Baseline information and be assembled from previously cited data sources as well as behavioural measures determined by enforcement assessments.
- The next step is to establish a baseline of the existing violation that is occurring at each site. This is important for the following reasons:
 - To inform supervisory officers of the precise times and locations to allocate resources for enforcement
 - To quantify the volume of violations

- To gauge the public's level of awareness and concern for traffic violation, such as speeding and reckless driving and their perceived risk of apprehension if they obey the traffic legislation
- To allow evaluation of the effectiveness of the enforcement activities and determine the outcomes.

Once the data assessment has been completed it is fairly simple to determine how police resourcing will align with the problems identified. It may be necessary to reconfigure the existing shift schedule to cover high crash locations at high crash times. Traffic deployments should also maximize public awareness. Traffic Police officers should be deployed in highly conspicuous clothing to ensure their enforcement activity can increase driver awareness and behaviour. It is always beneficial to deploy as many resources as possible in the early stages of the program when publicity and media interest will be at its peak.

To ensure the effects of enforcement are maximised and extended for the longest possible period, resources should be deployed with accompanying publicity. This can take the form of telling the public when and where some but not all the enforcement work will be undertaken. Local press, radio and television should be used where possible and small signs can be attached to lampposts stating the traffic enforcement is being undertaken here. It is helpful to enforcement if the local traffic police can be allocated a slot, once or twice a week, on a local radio station, to talk about enforcement and other road safety matters.

In addition to the violation tickets issued to drivers, it is important for police to record other information concerning the offenders, their vehicle and other actions taken by police, this information can be recorded on a basic data sheet and should be done by each individual Traffic Police officer for each shift. In addition officers hours, times and locations should also be included. The information should then be passed to the Data Analyst for collation, assessment and analysis. This information is used for offender profiling and enables more accurate targeting of offenders and vehicles.

A basic sheet can be designed to suit the needs of the Traffic Police. The information on the form could also be used to monitor the activity and performance of individual Traffic Police officers. This can be used to identify training needs or other measures to improve officer performance and capacity. In addition officer deployment information contained on those shift reports will enable senior officers to assess the necessary deployment to reduce crashes. The information contained in the officer's shift report is crucial in assessing the program effectiveness and efficiency. Over time an inventory of enforcement deployment intensities by road type can be determined and establish a best practise.

The role of the Data Analyst, or other resources that can perform those functions, is vital for effective Data-led enforcement. The results from "before" measurements need to be compared

to the “after” measurements. In this way the effect of enforcement on driver behaviour can be measured by the reduction of violations and reductions in accidents and casualties.

Established measuring and monitoring practise would recommend:

- Regularly monitoring road user behaviour and police enforcement deployment outcomes
- Look to improve data quality
- Communicate compliance and enforcement outcome data to relevant stakeholders
- Use the data to monitor success and indentify deficiencies
- Set quantitative targets based on compliance indicators
- Seek to reach these targets by applying proven enforcement strategies

The results of the analysis should be feed back into the deployment strategy and, where necessary, the strategy amended to reflect the new information. For example, the information from officer’s data sheets and enforcement measurement surveys may indicate a change in the times for deployment or direction of travel.

To maximise the effects of enforcement, it is necessary to publicise the results that have been achieved. This serves a number of useful purposes:

- Informing the road users of the police activities
- Showing how effective the police are enforcing the law
- Reassuring the community about their safety on the road
- Warning road users that police are active in detecting drivers which not obeying the traffic legislation.
- Encouraging compliance with the law
- Emphasizing that safety is the goal of the enforcement activities

Information distributed on local or regional level used to be more effective than information distributed on central level.

Remark: Performance indicators should be developed by the Consultant when requested information from State Road Police is available, see Appendix 1:1 to 1.3.

3.9 Traffic Enforcement of commercial traffic

3.9.1 Overloaded vehicle

Overloaded vehicles are illegal in most countries. The reasons behind the special regulations on overloaded vehicles are mainly:

- To prevent road accidents
- Vehicles that are overloaded cause excessive wear and damage to roads, bridges, and pavements etc.
- Serious overloading can affect the road safety by making the vehicle less stable, difficult to steer and increase stopping distance when breaking
- Overloaded vehicles are in unfair competition with other commercial operators.

In the European Union there is a directive (96/53/EC with amendment in 2002/7/EC) on maximum authorized dimensions in national and international traffic and the maximum authorised weights in international traffic.

This directive is an example of good international regulation concerning loading of commercial vehicles and the background to enforcement procedure concerning overloaded vehicles.

In the directive the maximum authorised vehicle weight in international traffic is stipulated.

The working methods can differ depending on which weighing system used. There are three different systems of equipment:

- Stationary Weight bridges
- Portable Scales
- Selective Weighing Systems (WIM Systems; (Weighing-In-Motion))

3.9.2 Safety loading and carriage of oversized goods

The basic aims of the legislation concerning safety loading and carriage of oversized goods are to prevent road accidents and to protect road users.

During many years the European Community (EC) have developed guidelines on safety loading. The result of this work is a report “European Best Practice Guidelines on Cargo Securing for Road Transport” (European Guidelines). The guidelines are developed for road and sea transports. The member states of EC accept these “European Guidelines”.

The European Guidelines are based on IMO/ILO/UN ECE's "Guidelines for Packaging of Cargo Transport Units (CTUs)" and IMO's "Safe packing cargo transport unit" section "Quick lashing guidelines for transport on road and sea in areas A, B & C".

However, the regulations differ from country to country in Europe. Germany has administered the regulations in EN 12195-1 (Load restraint assemblies on road vehicles).

The regulations in Germany are very strict. Some countries have regulations similar to the "European Guidelines". A few countries have very liberal regulations concerning safety loading.

Transports of oversized goods that do not agree with the national regulations needs permission. For international transports with oversized goods there special permission needs in every operating country

In the European Union there is a directive (96/53/EC with amendment in 2002/7/EC) on maximum authorised dimensions in national and international traffic and the maximum authorises weights in international traffic.

In most countries the regulations are very strictly formulated because safety loading and carriage of oversized goods are of importance for road safety.

The best international practices when enforcing safety loading are:

- The Traffic police officers should be well educated and trained in the regulation and practices.
- The Transport documents should be checked, especially the information concerning the weight of the individual cargo/package.
- On the vehicle, the open cargo area should be controlled by checking carrying straps and the vehicle construction etc.
- Containers and covered trailers should also be checked when enforcing safety loading. Most countries have regulations allowing the Police to check covered areas on vehicle and trailers.
- The Traffic Police officers should check the material on the floor surface of the cargo area on the vehicle in order to assess the coefficient of the friction.
- The Traffic Police officers should check the material at the bottom of the cargo/package also in order to assess the coefficient of the friction.
- After determining the coefficients for the cargo area and the cargo/package it is possible to calculate if the loading is safe.

- The calculation procedure on safety loading can be carried out by use of the Consultant's report "Draft final guidelines and manuals and programs", see Chapter 2.2.4.

The best international practices when enforcing oversized goods:

- When the cargo exceeds the dimensions stipulated in the regulation the operators need a special permission on the transport of oversized goods. When a commercial operator is lacking such permission the Traffic Police officer should report the violation. The operator should be required to off-load before continuing.
- Operators can get special permission on oversized transport. The Traffic Police should get information about the permissions for abnormal transport from the responsible authority, usually the Road Administration. Information about time, routing, vehicle etc. can be used for enforcement activities.

The carriage of oversized goods and safety loading are strictly enforced in most countries in Europe.

There is no need of special equipment when the Traffic Police officers enforce these issues.

3.9.3 Transport of dangerous goods

Hazardous goods are materials which represent particular risks to life, health, and the environment and material property.

The basic aims of the legislation concerning transport of dangerous goods include:

- Directing the transport of goods to vehicles and transport routes where the probability of accidents and the expected amount of damage in an accident are as low as possible
- Ensuring that goods are loaded, packaged and marked in a responsible manner
- Ensuring that the goods are handled in such a way that the additional risk attributable to hazardous goods is as small as possible
- Enabling those who transport hazardous goods to limit the extent of injury in an accident by informing them about the nature of the goods and measures to reduce injury and damage caused by the goods
- Organising quick help and rescue measures in the event of an accident.

Based on the UN recommendations special regulations on transport of dangerous goods have been developed. The regulations apply to transport of dangerous goods by roads, sea and air. The UN recommendation is the basic document for all these transport of dangerous goods, regardless of the type of transport. The UN recommendations were drawn up within the framework of the UN Economic & Social Council (ECOSOC).

Anyone who classifies, packages, or makes arrangements to the transport of dangerous goods mainly needs to apply the regulations for international and national road transport.

In Europe there is a Council directive (95/50/EC of the 6th October 1995) on uniform procedures for checks on the dangerous goods in road transport. The directive applies to checks carried out by Member States in the European Union on the transport of dangerous goods by road in vehicles travelling in their territory or entering it from a third country (without ADR-agreement, for example Iran).

The Member States in the European Union shall ensure that a representative proportion of consignments of dangerous goods transported by road are subject to the checks laid down by the Directive, in order to check their compliance with the laws on the transport of dangerous goods by road. The checks shall be random and shall as far as possible cover an extensive portion of the road network.

The places chosen for these checks must permit infringing vehicles to be brought into compliance or, if the authority carrying out the check deems it appropriate to be immobilised on-the-spot or at a place designated for that purpose by the said authority without causing a safety hazard.

Checks may also be carried out at the premises of undertakings, as a preventive measure or where infringements that jeopardise safety in the transport of dangerous goods have been recorded at the roadside. The purpose of such checks shall be to ensure that safety conditions for the transport of dangerous goods by the road comply with the relevant laws.

In order to carry out checks the following checklist is used by the Traffic Police officers in most countries of Europe with some national infringements:

1. Transport documents
2. Instructions in writing
3. Bilateral/multilateral agreement/national authorisation
4. Certificate of approval for the vehicle
5. Driver's training certificate
6. Goods authorised for transport
7. Vehicles authorised for goods carried

8. Provision related to mode of transport
9. Mixed loading prohibition
10. Loading, securing of the load and handling
11. Leakage of goods or danger to package
12. UN packing marking/tank marking
13. Package marking and labelling
14. Tank/vehicle placarding
15. Vehicle/transport unit marking
16. General purpose safety equipment specified in ADR
17. Equipment according to the instructions in writing
18. Other equipment specified in the instructions in writing
19. Fire extinguisher(s)
20. Remarks

All infringements are classified into three risk categories. The three risk categories are important for achieving the same judgment in all countries in Europe. The definition of the risk categories are:

Risk Category 1: Where failure to comply with relevant ADR provisions creates a high-level risk of death, serious personal injury or significant damage to the environment such failures would normally lead to taking immediate and appropriate corrective measures such as immobilisation of the vehicle.

Risk Category 2: Where failure to comply with relevant ADR provisions creates a risk of personal injury or damage to the environment such failures would normally lead to taking appropriate corrective measures such as requiring rectification at the site of control if possible and appropriate, but at the completion of the current transport movement at the latest.

Risk Category 3: Where failure to comply with relevant provisions result in a low level of risk of personal injury or damage to the environment and where appropriate corrective measures do not need to be taken at the roadside but can be addressed at a later date at the undertaking.

The checks shall be documented in a special control document, "Checklist".

Similar checklist is practised in many countries outside Europe.

3.9.4 Driving and resting times

Fatigue is a serious road safety problem. In Europe the authorities responsible for the social legislations concerning commercial driver safety and health have concentrated their measures concerning fatigue by a special legislation. The legislation targeting the driver and the enforcement of the drivers driving and resting times is an important part of the social legislation in the countries in European Union.

In Europe all new mobile road transport commercial vehicles, buses and trucks, should be equipped with digital tachographs from the 1st of May 2006. The analogue tachographs are therefore still used in commercial buses and trucks manufactured before May 2006.

The organization of the working time of persons performing mobile road transport activities is important for

- road safety,
- working conditions and
- Creation of a common market for inland transport services.

There is a need to promote the training of commercial operators and commercial drivers in the social legislation concerning working time, driving and resting times etc.

In many countries there is also a need to tighten up enforcement and sanctions concerning commercial driver health and safety and especially to increase the number of checks, to co-ordinate the inspection activities and to promote the training of enforcement officers.

There are few data on road safety that provide insight into the causes of accidents and no data that relate the accidents to the working hours of the professional drivers. According to the literature, fatigue, however, is an important factor in 10-25% of traffic accidents. There are several factors that contribute to driver fatigue. Working time is one of these factors. Within working time, the driving and resting time are the most important factors. After four hours of continuous driving, the accident risk is doubled, and after eight hours of continuous driving it is ten times higher.

In Europe accident data available do not discriminate between employed and self-employed drivers. Therefore it is not possible to present conclusions on the possible impact of the inclusion of self-employed drivers on road safety. There are some limited data that provide some insights into the working hours, working environment and aspects of health and safety of self-employed drivers, which can be related to road safety.

However, the conclusion is that the regulations targeting self-employed commercial drivers on driving and resting time must be the same as for employed commercial drivers.

Different degrees of fatigue:

Light fatigue	yawning, difficult to hold focus
Advanced fatigue	Heavy eyelids, have to strain in order to stay awake
Strong fatigue	Very heavy eyelids, must fight to hold the eyes open. Poorer ability to react, memory lapses
Extreme fatigue	constantly nodding your head, must strain yourself to the utmost to stay awake, periods of inattention

Different reasons for fatigue are irregular hours of work, dull work, lifestyle, disease, caffeine, nicotine and stress. However, fatigue can be reduced by a short nap of about 30 minutes. Coffee and fresh air can also help.

In general, workers in the transport sector have long working days and working weeks, in comparison with workers in other sectors. Within the transport sector, self-employed drivers work even longer working weeks and days. A decrease in working time of self-employed drivers might in theory lead to less fatigue among self employed. This could lead to fewer accidents caused by fatigue.

Six hours of sleep for the drivers and then being awake more than 16 hours, 39 % of the traffic accidents between 02 and 06 at night and between 14 and 16 in the afternoon, were fatigue related. Driving after awake for 20-24 hours can be placed on level with driving with 0.8 per mille alcohol in the blood. The largest risk for fatigue is between 03 and 05 at night, called the “The hours of the wolf”. The risk for fatigue increases in connection with prolonged stress. Other factors that contribute to fatigue are for examples monotonous driving, staying awake during long time, torpor burst, disease, road lighting and weather conditions.

About 20 % of persons working night shifts have problems to stay awake during the whole working time.

A long period of driving without break can reduce the ability to stay awake and decrease the ability to react. Therefore there is a need for social legislation on weekly working time, driving and resting times etc.

The organization of working time of persons performing mobile road transport activities is an important part of road safety regulations. The social dimension of the regulations is also pointed out by use of the term “Social legislation”.

In the European Union there are some basic regulations concerning social legislation relating to road transport activities which are good international regulations and practices.

The basic legislation is the Regulation (EG) No 561/2006 on harmonization of certain social legislation relating to road transport.

A basic background to the regulations is that the driver shall record any time spent driving a vehicle used for commercial operations as well as other work (in accordance with a special article in the regulations).

In Regulation (EG) 561/2006 there are also rules targeting the drivers of vehicles in commercial operations.

Some of these rules are important to mention when presenting some good international regulations concerning driving and resting times:

- The daily driving time shall not exceed nine hours. However, the daily driving time may be exceeded to at most 10 hours not more than twice during the week.
- The weekly driving time shall not exceed 56 hours. The weekly working time shall not exceed 60 hours.
- The total accumulated driving time during any two consecutive weeks shall not exceed 90 hours.
- Daily and weekly driving times shall include all driving time
- After a driving period of four and a half hours a driver shall take an break of not less than 45 minutes, unless he take a rest period. This break may be replaced by a break of at least 15 minutes followed by a break of at least 30 minutes. After a break of not less than 45 minutes start a new 4.5 hours driving period.
- A driver shall take daily and weekly rest periods.
- Within each period of 24 hours after the end of the previous daily rest period of 11 hours or weekly rest period a driver shall take a new daily rest period. A driver may have at most three reduced daily rest periods of nine hours between any two weekly rest periods.
- A driver engaged in multi-manning must have taken a new daily rest period of at least nine hours.
- In any two consecutive weeks a driver shall take at least:
 - two regular weekly rest periods or
 - one regular weekly rest period and one reduced weekly rest of at least 24 hours. However, the reduction shall be compensated by an equivalent period of rest taken together before the end of the third week following the week in question.
- A weekly rest period shall start no later than at the end of six 24-hours periods from the end of the previous weekly rest period.

In Regulation (EG) 561/2006 there are also some special regulations concerning liability of transport undertakings, exceptions, control procedures and sanctions etc.

In the European Union these rules, mentioned above, are accepted by the commercial traffic operators, unions of commercial drivers and the enforcement authorities. The rules are enforced by use of information from digital or analogue tachographs and carried out by roadside checks or inspections at Commercial operator's offices.

The stationary and roadside checks must be executed efficiently and quickly, with a view to completing the checks in the shortest time possible and with the least possible delay for the driver.

The best practice in the enforcement operations should be an important part of the Enforcement Strategy.

The items to be checked by Roadside checks are:

- daily and weekly driving times
- breaks and daily and weekly rest periods
- speed as recorded on the tachograph and
- correct functioning of the tachograph devices.

It is important to emphasize that an effective control of the individual drivers' driving and resting times is one of the most important issues when promoting road safety. Appropriate legal powers should be available to enable them to carry out their duties effectively and efficiently.

The basic platform for enforcement of commercial drivers' driving and resting times are the tachograph devices installed in the vehicles.

Best practices for enforcement at stationary checkpoints or at roadside checkpoints shall be a topic in the development program.

3.10 Some comments on traffic police training courses

Modern Road Policing takes it for granted that the Traffic Police officers, on all levels, are well educated and trained. In all countries the Traffic Police officers have to participate in a qualified, basic Traffic Enforcement Education and Training courses and further education and training governed by requirement.

The Traffic Legislation changes and new methods and technical devices are developed. The Traffic Police officers on all levels of the organisation therefore need both theoretical education and practical training.

The Traffic Enforcement Education and Training regularly have to be evaluated, developed and adjusted to the present and future requirements with the purpose to carry out the Traffic Enforcement efficiently and pay attention to the legal rights of the individual.

One of the objectives is to give the participants in the Traffic Enforcement Education and Training courses knowledge of the Traffic Enforcement as a part of the National Road Safety Work. Where appropriate, the International Road Safety Work also needs to be commented.

The contents of the training courses ought to be based on field experiences, scientific reports, state-of-the-art technology and presumptions in Azerbaijan.

The conditions of the traffic on the road network influence the Traffic Enforcement Education and Training. They are, among others, the Road Users' High Risk behaviours to enforce, the number of Road Accidents, Traffic Legislation and Sanctions, State Road Police resources (number of Traffic Police officers and available equipment) and the State Road Police Enforcement Strategy.

The conditions have to be clarified before planning and implementation of the training activities outlined in the ToR and the Inception Report.

As a background to the Development Program and when outlining final course material, the Senior Traffic Enforcement Specialist has mainly studied the current Road Safety situation in Baku and on the road network. The assessment of the State Road Police Enforcement resources and activities is essential, see chapter 2.

The cooperation with the Central Leadership of the State Road Police is important for the implementation of and carrying out the Development program.

The main objectives of Traffic Enforcement Education and Training Program, especially the priorities and scope, ought to be a part of the State Road Police Strategy, the Annual Plan and the Annual Training Plan.

3.11 Some comments on traffic enforcement equipment

3.11.1 Introduction

International experience shows that a national Traffic enforcement organisation (as the State Road Police), has to clearly state the priorities and Traffic enforcement working methods. When this has been agreed, further decisions can be taken concerning the equipment. If decisions concerning equipment are taken before decisions on priorities and methods, the

decision concerning equipment will govern the working methods. Such development will only favour the sellers of enforcement equipment and will lead to inefficient use of police resources.

The following questions are some of the basic issues concerning equipment needs:

- Which approach should be used in traffic enforcement activities to be an effective and active part of the road safety efforts:
- Which enforcement methods and techniques are allowed by the Traffic legislation?
- Which enforcement methods and techniques should be used by the State Road Police?
- Which equipment is needed for these enforcement methods?

The Traffic enforcement strategy on the road network in Azerbaijan ought to be “Targeting High-Risk Safety Behaviours” which means that the Traffic enforcement shall focus on traffic violations which are known to be a major factor in fatal and serious injury crashes. The General Deterrence Traffic Enforcement Theory/Strategy should be practised.

The equipment used by the State Road Police must support the General Deterrence Traffic Enforcement Theory/Strategy. The analysis of the equipment needs must therefore be concentrated on equipment appropriate to use when enforcing High-Risk behaviours.

The most common international Traffic Enforcement working methods, carried out in different combinations, are relevant to discuss in connection when developing a plan for equipment investment. The basic methods are:

- Open and visible surveillance
- Concealed surveillance
- Mobile Traffic enforcement
- Temporary Roadside checkpoints
- Stationary Roadside checkpoints
- Manual and Automatic Traffic enforcement

In this case the State Road Police have to observe that it is necessary to make a distinction in operations between stationary and mobile methods of policing when procuring equipment destined for Traffic enforcement. This distinction is important because the two groups of methods (or the two approaches) seem to have different effects on road users’ behaviour. Both stationary and mobile surveillance have the potential to influence the road users/ behaviour, but in different situations.

Some of the most important parts of the General Deterrence Traffic Enforcement Theory/Strategy are the very visible and active Traffic enforcement and the routines to bring the offenders to justice in a quick and efficient process. The Specific deterrence results from road users actual experiences with detection, prosecution, and punishment.

An efficient ATC System with speed cameras is of great importance when condition the driver's behaviours on the road network. An ATC System with speed cameras including a Central Control Unit for management of the system can also be used for execution of fines.

Marked Police cars positioning has a high deterrence potential at the site of the surveillance. It has been shown in several studies that a "not moving" Marked Police car has an immediate effect on road users' behaviour because the stationary surveillance is mostly highly visible and will be seen by many road users. Overall, stationary surveillance in most countries is more effective than mobile surveillance because by stationary surveillance it is easy to check many drivers and vehicles.

General deterrence can be defined as the impact of the threat of the legal punishment on the public at large. Specific deterrence can be seen as the impact of the actual legal punishment on those who are apprehended. Thus, general deterrence results from the perception of the public that traffic laws are enforced and that the risk of detection and punishment when traffic laws are violated. The general assumptions underlying police enforcement is that it should primarily aim at general deterrence, which is first and foremost achieved by increasing the subjective risk of apprehension. The subjective risk of apprehension, and hence the effectiveness of police enforcement is larger if police enforcement is:

- Unpredictable and difficult to avoid
- A mix of very highly visible and some less visible activities
- Primarily focused on times and locations with high violation (Maximal feedback to potential offenders)
- Continued over a longer period of time

These general principles may need further province-specific tailoring to account for provincial differences with regard to violation levels, road network status, and sometime even social norms.

The Traffic enforcement on the road network in Azerbaijan should be "Targeting High-Risk Safety Behaviours" which means that the Traffic enforcement shall focus on traffic offences which are known to be a major factor in fatal and serious injury crashes. The equipment used by the State Road Police must support the General Deterrence Traffic Enforcement Theory/Strategy. The analysis of the equipment needs must therefore be concentrated on equipment appropriate to use when enforcing High-Risk behaviours.

In the Technical Report 3 “Traffic Enforcement Equipment for State Road Police” the Consultant in details will develop issues regarding equipment used, system approach equipment needs, equipments needs, specifications and maintenance (service, repairs etc) for the State Road Police.

During the preparation for this report the Consultant has found that the State Road Police at present time, in some parts, are lacking equipment like:

- Stationary and Mobile ATC cameras for speed surveillance organised in an ATC System
- One Central Control Unit for a National ATC System regarding speed cameras
- Equipment dedicated for traditional speed enforcement
- Equipment for roadside enforcement of drink and drug driving
- Equipment for surveillance and registration of aggressive driving
- Modern equipment dedicated for Stationary Roadside checkpoints
- High reflecting Marked Police cars dedicated for deterrence traffic enforcement. The State Road Police cars, painted in blue and white, are not painted with high reflecting paint, which since many years is a very important aspect of modern international road policing.
- A functional database system on line for traffic accident data and statistics, which should be possible to use from different locations for intelligence led Traffic enforcement (not developed in this report)
- A functional database system on line with information on used resources for different Traffic Police operations and activities, numbers of protocols and citations for different traffic violations etc. This database should also be possible to use in the provinces for intelligence led Traffic enforcement (not developed in this report)
- Equipment to use on Traffic accidents sites.

3.11.2 Stationary and mobile ATC

The ATC system consists of a number of objects (stretches of road) that are located where they provide major road safety benefit. Every object consists of one or more ATC measuring stations. Measuring stations at every object are controlled by a control profile that governs when and how the object is activated. The control profile is transmitted from a Control unit to the measuring station.

The measuring stations use radar to measure the speed of all passing vehicles. When the station is activated, pictures are taken of the vehicles and drivers of vehicles that have exceeded the speed preset in the measuring system.

Information on the speeding offence – the case data – is encrypted and stored in the measuring system. The information is sent to the Control unit for investigation and preparation of legal proceedings for the speeding offence.

A mobile measuring station may consist of an ATC bus or an ATC trailer. Measuring systems for mobile ATC and working routines for their use are always the same, regardless of whether the systems are installed in trailers or buses.

An ATC bus is a minibus, mainly with normal police livery, which is equipped with systems for automatic speed measurement. The buses are located at the roadside and measure and record the speed through the rear window of the bus.

An ATC trailer is equipped with systems for automatic speed measurement. The trailers are located along the roadside and measure and record the speed from the measuring system located on the rear frame of the trailer.

3.11.3 Equipment for mobile enforcement

The traditional mobile enforcement should be carried out from Marked and Unmarked Police cars (and from motorcycles where available).

Marked Police cars should be equipped with laser instrument, alcohol screening instrument, drug test devices and First Aid Kit.

Unmarked Police cars should be equipped with video camera and speed computer time/distance type device, alcohol screening instrument, drug test devices and First Aid Kit.

During patrolling the roads the Traffic Police officers may have to participate on the accident scenes. The behaviour on accident scenes must be safe and not create more risks for the Road users and the Traffic Police officers. Equipment needs for the accidents scenes, to bring along in the Police cars during mobile enforcement, are available and can usually be delivered to the Police forces in short turn.

3.11.4 Equipment for temporary and stationary roadside checkpoints

On Temporary Roadside checkpoints usually drink and drug driving, the use of seat belts and helmet and speed enforcement with laser instruments are carried out. The Temporary Roadside checkpoints should be set up by Police officers patrolling the roads.

The Traffic enforcement equipment needs for Temporary Roadside checkpoints are the same as used during Mobile enforcement. Therefore there is no need for special equipment dedicated especially for Temporary Roadside checkpoints.

To make the Temporary Roadside checkpoints more visible, special signs, flag etc. can be used to inform the road users about the enforcement.

3.11.5 Equipment for protection of traffic accident sites and first aid

It is recommended following:

- A joint Emergency Training Course including First Aid
- All Traffic Police cars should be equipped with First Aid Kits
- Hydraulic Rescue Tools to all Stationary Roadside checkpoints

Additional to the equipment mentioned above the following equipment needs in Traffic Police cars for use at the Traffic Accident scene:

- Vehicle Matrix (special cars)
- GPS
- Police Warning signs
- Cones
- Additional flashlights

4 Draft proposals on Capacity Building State Road Police

4.1 Proposal 1: Improvement of the State Road Police Policy

Capacity building of the State Road Police is stipulated in the ToR. The basic assessment of the State Road Police has indicated that there is a need of capacity building and improvement.

There is a lack of available information for the Consultant depending of the nature of the State Road Police as a police organization. The State Road Police have some security limitation to confide the Consultant with requested information on activities, resources and results. However, the requested information is of essential importance when developing a Capacity Building program for the State Road Police.

During the proposed Workshop and the Management course for high-ranked Police officers it is a good opportunity for the Consultant to learn more about the State Road Police Traffic Safety Work, management policy, activities, resources and results. After the delivery of the Workshop and Management course this proposed Capacity Building program would be revised regarding some issues.

The Consultant proposes that the Capacity building for State Road Police should start with following issues and proposed timetable

1) The Traffic Law Enforcement: Year 2012

The State Road Police should together with other road safety stakeholders carry out an assessment of the chain legislation-enforcement-sanction regarding over speeding, non use of seat belts and helmet, reckless and dangerous driving and violation in commercial traffic. The State Road Police should initialise quick and adequate changes in the legislation when needed.

The legislation and the practises concerning decision and installation of road signs along the road net work should be developed.

2) The Traffic Enforcement procedures: Year 2012

The State Road Police should carry out an assessment of current reporting procedures and initialise quick and adequate changes in the reporting procedures when needed.

3) The General and Specific Deterrence Traffic enforcement concepts: From year 2012

The strengthened general deterrence concept should be accepted and carried out by the State Road Police. The concept ought to be developed as a part of the vision or in the strategy by a

decision of the State Road Police. Proposal: “*The State Road Police should carry out traffic enforcement in accordance with the general deterrence theory*”.

4) Addressed Traffic enforcement: Year 2012-2014

The traffic enforcement should focus on following high risk behaviours on the road network:

- Speed enforcement
- No seat belt wearing

Other violations to monitor and report in high extent are:

- Reckless and generally threatening, aggressive driving
- Commercial traffic
- Drink- and drug driving

The decision regarding addressed enforcement ought to be regulated in the State Road Police Annual, Half year- and Quarterly plans.

5) Data-led traffic enforcement: Year 2012-2016

The State Road Police should introduce more data-led enforcement. The Traffic Report form should be developed regarding information needs for planning of surveillance activities and the statistics received from the system should be analysed and used as background for enforcement activities in time and place.

A Traffic Enforcement Management Data System ought to be developed by a decision of the Head of the State Road Police and put into practise to carry out effective data-led traffic surveillance.

6) Strategic analysis and planning: Year 2012-2016

The current strategic analysis and planning model should be supported by a Traffic Enforcement Management Data System.

7) Operational analysis and planning: Year 2011-2016

Carry out Baseline studies year 2011.

The current operational analysis and planning model should be supported by a Traffic Enforcement Management Data System.

8) Traffic Enforcement of commercial traffic: Year 2012-2016

The addressed enforcement of commercial traffic should increase. Overloaded vehicle, vehicle loading, transport of dangerous goods and drivers driving and resting times should be focused. The State Road Police should co operate with other concerned stakeholders regarding commercial traffic. The activities ought to be regulated in the State Road Police Annual, Half year- and Quarterly plans.

9) Traffic Police Training courses: Year 2011-2013

In the Azerbaijan Road Safety Program proposed courses dedicated for the State Road Police will be the first step. Next step ought to be to carry out special training courses regarding data-led enforcement, incident management and special management courses for regional traffic police leaders.

10) Modern Traffic Enforcement equipment: Year 2011-2016

The mobile traditional traffic enforcement should be carried out by marked and unmarked cars and on stationary road side checkpoints, which are well equipped with traffic enforcement devices such as laser or radar instruments for speed control and alcohol screening instruments.

The equipment vision should be that the Strengthened General Deterrence Traffic enforcement on the road net work should be based on the Stationary ATC System complemented by Mobile ATC system.

The data-led traffic enforcement should be analyzed and planned with support of the current and developed Traffic Accident Data System and the proposed Traffic Enforcement Management Data System.

4.2 Proposal II: Training needs

4.2.1 General

In the Azerbaijan Road Safety Program the task regarding traffic enforcement is concentrated to capacity building of the State Road Police.

The State Road Police is responsible for traffic enforcement on the road network which is an advantage when agreeing on a professional development program and transfer of knowledge in order to enhance the enforcement skills of senior police officers, instructors/trainers and traffic police officers. It will also be an advantage when planning and carrying out the annual enforcement program.

In the Technical Report 2, planned to be finalised at the end of December 2010, the Consultant will in detail present the final proposal and a preliminary timetable regarding the development program.

In accordance with the ToR there are following development program which should be carried out during the Program:

- 1) A Workshop
- 2) Two-day Leadership course
- 3) Five-day Trainer/Instructor course
- 4) Traffic police officers course

During meetings with the Liaison police officer, appointed by the Head of State Road Police and during the Workshop the 7th of December 2010 the Consultant has for sure got useful information regarding requested training topics and the needs among senior police officers of information and training regarding modern road policing, capacity building and how to carry out development programs.

The Consultant intends to give the leadership course a management approach.

Remark:

The development of Technical Report 2 will be based on presented international knowledge and experiences and the proposals in chapter 3 and 4 in this report. The Technical Report 2 will also be based on information requested from the State Road Police see Appendix 1.1 to 1.3.

However, the requested information is not yet available for the Consultant which could delay the finalization and distribution of Technical Report 2 on Training needs.

4.2.2 The Workshop Task 3

In accordance with the Project Terms of Reference “the Consultant- SweRoad shall take advantage of the State Road Police high-ranked and very senior police officers experiences of traffic enforcement”.






Azerbaijan Road Safety Program – Workshop on Traffic enforcement

Date: The 7th, 8th or 9th of December 2010

Time: 09 to 12


Place: Road State Police Headquarter (address)

Program:

	Opening speech 5 minutes	The Head of the State Road Police
	Azerbaijan Road Safety Project 15 minutes	Dick Jonsson, SweRoad
	Traffic enforcement and Road Safety 15 minutes	Håkan Jaldung SweRoad
	Traffic Enforcement Vision and Strategy in Azerbaijan 15 minutes	Senior Officer State Road Police
	Brake	

 Traffic enforcement activities and Equipment used and needs	Senior Officer State Road Police
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15 minutes

 International traffic enforcement experiences and best practices	Håkan Jaldung
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60 minutes

- The Traffic Enforcement procedures
- The General and Specific Deterrence concepts
- Addressed Traffic enforcement
- Data-led Modern Road policing
- Strategic analysis and planning
- Operational analysis and planning
- Traffic Enforcement of commercial traffic
- Some comments on Traffic Police Training courses
- Some comments on Modern Traffic Enforcement equipment

 Discussion on topics above	The participants
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4.2.3 The two-day Leadership course

Draft program

<u>Date:</u>	The 23th to 24 th of March 2011
<u>Time:</u>	Two working days
<u>Place:</u>	State Road Police Headquarter in Baku
<u>Trainer:</u>	The Senior Traffic Enforcement and Training Specialist, SweRoad
<u>Objectives:</u>	To improve the management skill to carry out Capacity Building Program regarding Traffic enforcement, Development Program and Equipment Investment Program.
<u>Outputs:</u>	Increased knowledge of international present good practices and trends in the field of Traffic law Enforcement, planning procedures, data-led enforcement, activities and equipment, the traffic safety factors, how to come over barriers to effective enforcement, the chain legislation-enforcement-sanctions as a part of the National road safety work etc others in accordance with the ToR. The knowledge should be used when State Road Police Capacity Building Program should be carried out

Draft program: Two-day Leadership course;

Day one:

Subject 1: Common regarding traffic enforcement

- Course information, definition of Traffic Law Enforcement, international traffic enforcement definitions, traffic legislation and road safety topics as background to traffic enforcement, traffic police resources, understanding the risks, the purposes of road policing, safety in traffic policing etc.

Subject 2: International road policing

- International traffic enforcement principles; Modern road policing, Traffic enforcement strategies, operational visions and operational traffic policing, evidence based policing, recording observation and obtaining evidence, high level coordination regarding road safety, speed and speed control strategies, “Traffic Enforcement operational Approach”.

Subject 3: Data-led traffic enforcement

- Data-led traffic enforcement
- Identifying the risks
- Example: Data-led speed enforcement
- How to use baseline studies as background to surveillance activities

Subject 4: Equipment as a part of the Traffic enforcement strategy

- “Traffic Enforcement Equipment Approach”

Day two:

Subject 5: Traffic enforcement management

- Effective management; strategic analysis and planning, operational analysis and planning, traffic enforcement activities, working methods and “best practises”, traffic accident investigation etc
- Effective management; Speed enforcement
- Effective management; Use of seat belts and occupants restraints, helmet wearing
- Effective management: Enforcement of reckless driving and alcohol interventions
- Effective management; Enforcement of commercial traffic
- Effective management; How to overcoming barriers to effective enforcement
- How to measure effective leadership?

4.2.4 The Five-day training course for trainers/instructors

<u>Date:</u>	The 4 th to 8 th of April 2011
<u>Time:</u>	One working week
<u>Place:</u>	Police school, Baku
<u>Trainer:</u>	The Senior Traffic Enforcement and Training Specialist, SweRoad
<u>Objectives:</u>	<p>To improve the individual competence as trainer/instructor and to increase their knowledge on traffic enforcement activities and First aid.</p> <p>By proposed concept “train-the-trainers”, dedicated to increase the Trainers/Instructors competence and skill, the objective with the course is to prepare the Trainers/Instructors to carry out an efficient and effective training to State Road Police in the Rayons in accordance with proposed Capacity Building Program as a part of the Azerbaijan Road Safety Program.</p> <p>To improve the theoretical and especially the practical knowledge about the co-ordination between the road safety work</p> <p>To improve the knowledge and skill about efficient Traffic Enforcement activities and working methods with focus on speed enforcement, non-use of seat belts, reckless driving, drink- and drug driving and commercial traffic violations.</p> <p>To improve the knowledge and skill regarding installation, use and procedures relating to technology for Traffic Enforcement.</p> <p>To improve the skill regarding the police procedures on traffic accident sites, traffic accident reporting procedures and First aid</p>
<u>Outputs:</u>	Increased knowledge and practical skill among the State Road Police Trainer/Instructors to carry out theoretical and practical training in accordance with the objectives for the course..

Draft program: Trainer/Instructors course

Day 1

Subject 1: Introduction to the course; 2 lessons

- Theoretical and practical education and training methods for instructors
- Modern Road Policing

Subject 2: Traffic police activities 1; 5 lessons

- Deterrence Traffic Enforcement targeting high-risk behaviours
- Traffic Accident Reporting System
- Working methods

Day 2

Subject 3: Traffic Enforcement methods; 3 lessons

- Traffic Enforcement tactics
- Traffic Police equipment and
- Commercial traffic
- Co-operation with Emergency services
- International Traffic Police ethics

Subject 4: Practical training preparation 1; 4 lessons

- Speed enforcement
- Non use of seat belts enforcement

Day 3

Subject 5: Practical training preparation 2; 4 lessons

- Drink- and drug driving
- Commercial traffic

Day 4

Subject 5: Practical training performance; 3 lessons

- Speed enforcement
- Non use of seat belts enforcement
- Drink- and drug driving
- Commercial traffic

Subject 6: First aid 1; 3 lessons

- Working with other emergency services. Understanding the roles of other emergency services and the particular role of the State Road Police
- Scene safety and management (risk assessment)

Day 5:

Subject 7: First aid 2; 8 lessons

- Theoretical knowledge of BLS
- Familiarity with the Chain of Survival, Platinum Ten Minutes, the Golden Hour etc.
- Practical ability to perform adult basic life support, including the choking protocols and the use of a face mask
- Ability to measure pulse and respiratory rate
- Ability to place casualty into a recovery position
- Ability to verbally report patient information
- Practical ability to perform pediatric basic life support, including the choking protocols
- Mechanisms of injury and causes of collapse
- Theoretical and practical knowledge of basic primary survey, AVPU (Alert, Voice, Pain and Unresponsive), and the importance of reassessment.
- Understanding of when to suspect cervical spine injury and of how to achieve manual in-line stabilization when handling a patient, including helmet removal
- Knowledge of methods to arrest hemorrhage, and its priority in patient care
- Knowledge of risks associated with Hepatitis B and HIV, and managements of high-risk events
- Knowledge of the common infestations
- Ability to formulate a verbal or written patient report in order to hand over care
- Working knowledge of a suggested basic First Aid Kit
- Eye injuries including that incurred by CS spray, pepper spray and laser guns.
- Tests, examination

4.2.5 The five-day traffic police officers course

Time: May to October 2010

Place: Courses in the Rayons

Trainer: The State Road Trainer/Instructors participated in the Trainers/Instructors course organized by Azerbaijan Road safety Program

Some basic support by the Senior Traffic Enforcement Specialist, SweRoad

Objectives: To improve the theoretical and especially the practical knowledge about the co-ordination between traffic enforcement and the road safety work

To improve the knowledge and skill about efficient Traffic Enforcement activities and working methods with focus on speed enforcement, non-use of seat belts, reckless driving, drink- and drug driving and commercial traffic violations.

To improve the knowledge and skill regarding installation, use and procedures relating to technology for Traffic Enforcement.

To improve the skill regarding the police procedures on traffic accident sites, traffic accident reporting procedures and First aid

Outputs: Increased knowledge and practical skill among the Traffic police officers to carry out practical general deterrence traffic enforcement on-the-road enforcement and the day to day contact with the road users.

Draft program: Five-day Traffic Police officers' course:

Day 1

Subject 1: Introduction to the course; 1 lesson

- Modern Road Policing

Subject 2: Traffic police activities 1; 6 lessons

- Deterrence Traffic Enforcement targeting high-risk behaviours
- Traffic police activities

- Traffic Enforcement tactics
- Traffic Police equipment
- Commercial traffic
- International Traffic Police ethics

Day 2 and 3

Subject 3: Practical training performance; 14 lessons

- Speed enforcement
- Non use of seat belts enforcement
- Reckless driving
- Drink- and drug driving
- Commercial traffic

Day 4 and 5

Subject 4: Traffic accident scene performance and first aid 1; 3 lessons

- Working with other emergency services. Understanding the roles of other emergency services and the particular role of the State Road Police
- Scene safety and management (risk assessment)
- Traffic Accident Reporting System

Subject 7: First aid 2; 12 lessons

- Theoretical knowledge of BLS
- Familiarity with the Chain of Survival, Platinum Ten Minutes, the Golden Hour etc.
- Practical ability to perform adult basic life support, including the choking protocols and the use of a face mask
- Ability to measure pulse and respiratory rate
- Ability to place casualty into a recovery position
- Ability to verbally report patient information
- Practical ability to perform pediatric basic life support, including the choking protocols
- Mechanisms of injury and causes of collapse
- Theoretical and practical knowledge of basic primary survey, AVPU (Alert, Voice, Pain and Unresponsive), and the importance of reassessment.

- Understanding of when to suspect cervical spine injury and of how to achieve manual in-line stabilization when handling a patient, including helmet removal
- Knowledge of methods to arrest hemorrhage, and its priority in patient care
- Knowledge of risks associated with Hepatitis B and HIV, and managements of high-risk events
- Knowledge of the common infestations
- Ability to formulate a verbal or written patient report in order to hand over care
- Working knowledge of a suggested basic First Aid Kit
- Eye injuries including that incurred by CS spray, pepper spray and laser guns.
- Tests, examination

4.3 Proposal III: Equipment needs

4.3.1 Introduction

In the Technical Report 3, planned to be finalised at the end of December 2010, the Consultant will in detail present the final proposal and a preliminary timetable regarding equipment need.

Remark:

The development of Technical Report 3 will be based on presented international knowledge and experiences and the proposals in this report. The Technical Report 3 will also be based on information requested from the State Road Police see Appendix 1.1 to 1.3.

However, the requested information from the State Road Police is not yet available for the Consultant which could delay the finalization and distribution of Technical Report 3 on equipment needs.

4.3.2 General regarding traffic enforcement equipment

In chapter 3.11 regarding some comments on Modern Traffic Enforcement equipment the Consultant have presented the most well known vehicle, traffic enforcement equipment and other devices dedicated for traffic enforcement.

The following list is more complete and can be used analysis equipments needs depending on enforcement strategy, selected activities, annual plans, available funds etc:

- Police coloured car
- Concealed police car
- Police coloured motor cycle
- Concealed police motor cycle
- Radio system
- Mobile telephone
- Mobile and/or in police car installed data system with access to the vehicle- and driver license register

- Stationary Automatic Traffic Control (ATC) system mainly for speed enforcement connected to and managed from a Central Control Unit (CCU)
- Mobile ATC system mainly for speed enforcement managed by a Traffic police officer
- Laser instrument
- Laser/video mobile
- Laser/video installed in car
- Radar instrument
- Radar/video installed in car
- Speed computer installed in car
- Stationary ATC system mainly for enforcement of road users behaviour connected and managed from a CCU
- Stationary breath alcohol evidence instrument connected to and controlled by a CCU. Managed by a Police officer
- Mobile breath alcohol evidence instrument managed by a Police officer, controlled by a CCU
- Breath alcohol screening instruments
- Drug test equipment
- Equipment for the traffic accident scenes
- Selecting weigh bridges
- Stationary weigh bridges
- Portable
- Mobile roller brake tester
- First aid kit
- Traffic enforcement management data system
- Speed analyzer
- Number plate recognition system

4.3.3 **Draft: Equipment needs**

The draft proposal for the first investment phase, year 2011, are to meet some very basic initial needs for trails, training and special actions:

- 30 GPS devises (at least one -----)
- One Speed analyzer
- 520 First Aid kits (one in each car)
- Two automatic mobile speed cameras (for development and special actions)
- 30 Handheld laser instruments (one per stationary checkpoint)
- 30 Alcohol screening instrument (one per stationary checkpoint)
- 30 Drug test devices (one per stationary checkpoint)

Available well functioning approved devices should be subtracted.

First Aid Kit for Road State Police ought to content:

- Green protective case (consider soft case due to lack of space in the State Road Police patrol cars)
- BLS protocol card
- Germicidal wipes (individual (10 off))
- Latex gloves 3 pairs
- Face mask (1 off)
- Tuff cut shears(1 off)
- Hypo allergenic tape (1 roll)
- Wound dressings-eye (2 off)
- Wound dressings-large (2 off)
- Wound dressings-extra large (2 off)
- Triangular bandage (2 off)
- Individual sterile plasters (package)

5 Schedule of work in Task 3

Number week	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Hakan, Task 3 = BAKU = HO																								
Activity 1	1																							
Review road safety problems																								
Review enforcement needs																								
Review current enforcement policy & procedures																								
Review equipment regarding its duties																								
Recommendation of changes in policy & procedures																								
Current equipment & materiel available																								
Assessment of future needs																								
Aproposed schedule for the rest of the project																								
Activity 2																								
Prepare a professional development program									3						5									
Program Workshop																								
Program Two-day management course																								
Program Five-day trainer/instructors course																								
Program Five-day training course traffic police officers																								
Prepare training materiel & slides															6		4							
Proposal equipment need; number & specifications									3						5									
Proposal of numbers of trained Traffic police officers									3						5									
Activity 3																								
Delivery of training cources																								
Program Workshop				2																				
Program Two-day management course																								
Program Five-day trainer/instructors course																								
Final technical specification equipment															5									
Advice to the police evaluation tender received																								
Activity 4																								
Observation of a set training courses in the rayons	2012 and 2013	2 weeks/year																						
Activity 5																								
Development of indicators for progress																								
Observation of a set training courses in the rayons	2012 and 2013	2 weeks/year																						
Remarks																								
1. Draft Technical Report 1																								
3. Draft TR2 and TR3																								
5. Final TR2 and 3																								
7. Leadership Management Course 2011-03-23--24																								
2. Workshop 20-12-07 alt 08 alt 09																								
4. Final TR1																								
6. Delivery of training mtrl and slides for the tranning courses																								
8. Train the trainer course 2011-04-04--08																								

Appendix 1:1

Form 1: Azerbaijan Road Safety Project, Capacity Building Task 3 Activity 1

State Road Police current resources and equipment

	<u>Number:</u>	<u>Manufacturer:</u>
Traffic Police officers	_____	
Traffic Enforcement Management Data System	_____	
Stationary Roadside Checkpoints	_____	
Police cars	_____	
Civil Police cars	_____	
Police motorcycles	_____	
Automatic fixed speed cameras	_____	
Automatic mobile speed cameras	_____	
Automatic Traffic enforcement cameras	_____	
Handheld laser guns	_____	
Handheld radar guns	_____	
Radar/laser installed in cars	_____	
Radar/laser/video installed in cars	_____	
Alcohol screening instruments	_____	
Alcohol evidence instruments	_____	
Drug test devices	_____	
GPS devices	_____	
First Aid kits	_____	
Other	_____	

(Date, Name and Title)

Appendix 1:2

Form 2: Azerbaijan Road Safety Project, Capacity Building Task 3 Activity 1

Number of reported Road Traffic violations year 2009

Total reported violations by State Road Police	_____
Speed violations	_____
Vehicle defects	_____
Non use of seat belts	_____
Driving against red light	_____
Reckless and dangerous driving	_____
Reckless overtaking (if possible)	_____
Drink driving	_____
Drug driving	_____
Commercial traffic violations (total if possible)	_____

Remarks:

.....

(Date, Name and Title)

Appendix 1:3

Form 3: Azerbaijan Road Safety Project, Capacity Building Task 3 Activity 1

Deployment of State Road Police activities

Speed enforcement (Mobile and on Temporary

Roadside checkpoints) _____

Enforcement on Stationary Checkpoints _____

Mobile enforcement by patrol car _____

Traffic flow enforcement (managing the traffic, escorts etc) _____

Total 100 percent

Remarks:

.....

(Date, Name and Title)