Turkish Court of Accounts

Performance Audit Report

PREVENTION ACTIVITIES AGAINST TRAFFIC ACCIDENTS

Summarized Version

MAY - 2008

This report was prepared in accordance with the Additional Article 10 annexed to TCA Law No:832 with the Law No: 4149 and it is deemed appropriate to be submitted to the Turkish Grand National Assembly upon the decree No: 5216/1 dated 08.05.2008 of the General Assembly of the Turkish Court of Accounts.

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EXECUTIVE SUMMARY

EFFICIENCY OF PREVENTION ACTIVITIES AGAINST TRAFFIC ACCIDENTS

INTRODUCTION

1. In Turkey, thousands of lives are lost while tens of thousands of people are injured in traffic accidents every year. Broken and vanished families as well as those disabled due to traffic accidents display the social dimension of this phenomenon whilst treatment costs of injured and material damages adversely affect economy.
2. There is a high risk of traffic accident in Turkey, emanating from road transportation and road haulage with the ratios of 95 per cent and 92 per cent respectively. While the number of accidents in 1998 in Turkey was 458.661; with 59 per cent rate of increase, this number reached to 728.756 in 2006.
3. In parallel with increase in traffic accidents, injury and death toll has increased since 2003. While being 118.214 in 2003; the number of injuries reached to 168.550 in 2006 with 42 per cent rate of increase. Similarly, death toll increased from 3946 to 4663. However, number of deaths in accident reports and amount of financial loss, which constitute basis for traffic accident statistics do not reflect the reality. Hence, real death toll and amount of financial loss incurred by accidents are well above figures announced. (Paragraph 1.1.5, 1.1.8)
4. Having considered statistical measure of “deaths per 100.000 vehicle”, which is considered as a significant data in terms of traffic accidents; situation in Turkey does not seem to be promising such that according to 2003 data, deaths per 100.000 vehicles is 16 in 2003 at certain OECD countries, while being 44 in Turkey. (Paragraph 1.1.6)
5. Four activities towards ensuring traffic safety come to the fore, which are traffic engineering, traffic training, traffic legislation and control, emergency rescue. Fifteen different boards, institutions and organizations are vested with authorities in performance of these activities.

AUDIT TOPIC AND SCOPE

6. Topic of our audit is “Effectiveness of Prevention Activities against Traffic Accidents”. These activities were examined within the framework of :
   - *National strategies for ensuring traffic safety;*
   - *Traffic training;*
   - *Traffic control;*
   - *Traffic signing and marking.*

Within this context, we examined and evaluated such topics as plans covering objectives, targets and priorities for preventing traffic accidents, general training plan and its application, traffic education provided at schools, training at driving courses and its control, traffic training broadcasted by national and local radios and TVs, traffic controls, training, human resources and planning of equipments, psychotechnics evaluations, imposition of traffic fines, and compliance of traffic signing and marking with standards.

7. Audit was carried out at following institutions executing main activities covered in our field of study:

- Ministry of National Education;
- Ministry of Health;
- General Directorate of Security Affairs;
- General Directorate of Highways;
- Municipalities;
- Revenue Administration;
- Radio and Television Supreme Council.

8. Audit topic falls within the scope of functions/activity fields of various different public institutions and organizations. Following assessment made on audit efficiency and performance risks, activities of General Command of Gendarmerie, engineering operations at highways, and first aid practices were excluded from the scope of this audit.

AUDIT OBJECTIVE

9. Objective of this audit is to contribute to the continuous improvement of prevention activities against traffic accidents dramatically leading to loss of life and property and within this framework, to ensure that relevant institutions and organizations take necessary measures in order to;

- Minimize traffic accidents according to a specific plan and prepare national traffic safety strategy enabling the utilization of resources in conformity with their purpose;
- Remove barriers to effective provision of safety-oriented traffic education to approximately 15 million school aged children; put Traffic General Training Plan into effect in real terms; increase quality of training provided at driving courses and control courses more effectively; for radios and TVs to assume their responsibilities with a view to informing community about traffic safety and raising their awareness and remedy deficiency of controls over this area;
- Open the way for effective traffic controls; ensure more effective utilization from human resources as well as equipments; make use of voluntary traffic controller system more effectively; and increase effect of traffic fines over traffic violations;
- Ensure conformity of traffic signs with standards established for roads, road maintenance works.

AUDIT METHODOLOGY

10. On the spot audit were carried out at 15 provinces of Turkey, which were considered to represent the whole country after considering the number of fatalities, traffic density at highways, characteristics of settlement areas showing geographical and climatic differences.

11. Meetings with universities, associations and foundations, etc were made, and opinions of many non-governmental organizations, experts and academicians were asked with regard to this issue.

12. Sources such as articles, communiqués, reports, etc falling within the scope of our audit were analyzed. World Report on Road Traffic Injury Prevention-WHO 2004 prepared jointly by WHO and Word Bank, the European Charter of Pedestrians' Rights (1998), International Road Traffic and Accident Database (IRTAD) as well as other countries' practices were utilized as well.

13. At central organizations and branch offices of institutions, interviews were made with authorized persons at every level; relevant documents were examined. Moreover, a survey was conducted at six provinces with participation of 821 citizens on the meanings of traffic signs. Breathe alcohol testing at forensic medicine institutions and hospitals at various provinces and General Directorate of Security Affairs controls over alcohol testing, radar applications as well as controls over pedestrians were observed and examined. Where appropriate, certain applications were photographed and recorded.

14. Compliance of training parcours and traffic parks for children with standards, and whether they are used actively were observed, checked on the spot and documented by photographs.

15. Procurement files and road marking projects as well as minutes of road construction and repair at Municipalities and Regional Directorates of Highways were examined in order to see to the extent which traffic signing complies with standards of General Directorate of Highways (GDH), and how their maintenance and repair are made. Moreover, in order to see compliance of marking projects or minutes of ongoing road construction and repair works with GDH standards and actual circumstances; on-site evaluations and observations were made, which were recorded and photographed.

MAIN AUDIT FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

National Strategy to Ensure Traffic Safety

16. As yet, a national strategy for traffic safety has not been implemented in Turkey. No study towards specifying national objectives as well as strategies in this field, and ensuring inter-institutional coordination has been conducted so far by National Road Safety Commission (NRSC) and Highway Safety Committee (HSC), which were established in 1997. NRSC has not convened since 1998, albeit it is envisaged to meet twice a year. (Paragraph 2.1.3, 2.1.4)

17. Towards developing a national strategy for traffic safety, "Road Improvement and Traffic Safety Project" (PITS) was brought into effect in 1996, and totally USD 311.026.247 was spent for the project. A long term "National Traffic Safety Program" was formulated for 2001-2010 thanks to consultancy service provided by a foreign firm in return for USD 2.500.000 within the framework of mentioned project. However, the program was not approved by NRSC and relevant ministries, thus a national framework for road safety could not be laid down. This has limited responsibilities of relevant institutions in the field of traffic safety with individual efforts. (Paragraph 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10)

∗ *A national strategy approaching traffic safety with a unified approach should be developed, and accordingly, plans and policies should be specified.*

General Plan for Traffic Training

18. Implementation, monitoring and inter-institutional coordination of General Plan for Traffic Training (GPTT) prepared by Ministry of National Education whereby pre-school, intra- and extramural traffic training are regulated were unsuccessful, although it was put into effect in 2001. In GPTT, neither objectives, targets and priorities nor a specific timing as well as resources to be used were specified, which hampered monitoring, evaluation of activities undertaken and establishment of coordination. Institutions held responsible within the framework of mentioned plan did not act delicately, leading to interruptions in the implementation. (Paragraph 3.1.1-3.1.15)

∗ *GPTT should be reviewed in line with today's conditions. Its objectives, measurable and clear targets, implementation methods as well as schedule should be specified. At the same time, principles and procedures of implementation should be arranged in detail, and if prepared, integrated with National Traffic Safety Strategy.*

Traffic Education in Schools

19. When education level of drivers involved in accidents resulted in deaths and injuries between the years 2002-2005 is reviewed, it is seen that approximately 50 per cent of them are graduates of primary school (Graphic: 8). This ratio reflects the importance of relationship between education and accident. (Paragraph 3.2.1)

20. Traffic and first aid lessons in schools are instructed by teachers that have not received education on traffic safety. Practical training equipments are not used sufficiently, and experiences of General Directorate of Highways are not benefited as necessary, which has hindered expected positive results from traffic education. (Paragraph 3.2.4 - 3.2.6)

21. For traffic and first aid lessons, assistance of trainers (coordinators) trained in traffic safety within the scope of PITS project was not taken sufficiently. At provinces selected within PITS Project carried out between the years 1997-2000, 479 teachers were trained as coordinators with the purpose of raising awareness among teachers, students and public at regions where traffic density is high. It was planned that trained teachers would share their knowledge they obtained from these courses to other teachers working at schools of their provinces or districts. However, at the end of course, almost none of coordinators were made to give traffic-training course to other teachers. Paragraph 3.2.7, 3.2.8)

> ∗ *At exams conducted via central system, knowledge of students in the field of traffic should also be tested so as to draw attention to the importance of traffic education and to increase interest. There should be coordination and cooperation established among Ministry of National Education, the Council of Higher Education and Ministry of Interior so as to ensure compliance of training given to those teachers that are to instruct traffic and first aid lessons with curriculum. In order for personnel of Provincial Directorate of Security qualified in a specific field to give a seminar to students, teachers, parents and managers in schools; closer coordination and cooperation should be established and sustained.*

Traffic Parks for Children

22. Construction of traffic parks for children was envisaged in 1998 with the idea that preschool and school aged children would acquire traffic rules and gain habit. However, no initiative has been taken at many provinces in ten years. For this reason, school aged children cannot benefit from practical traffic training at an optimum level. (Paragraph 3.2.9 - 3.2.14)

> ∗ *By taking number of students into account, Traffic Park needs of each province and district should be designated to make practical training more effective in traffic education, and construction of such parks should also be placed in building development plans. Additionally, construction of Traffic Parks at schools having proper physical conditions should be organized. Institutions should establish coordination and cooperation among them while planning the use of parks.*

Training Programs in Radio and TV Broadcasting

23. Beginning from 1997, broadcasting traffic-training programs for 30 minutes between 09:00 – 21:00 hours was made obligatory to radios and TVs in order to benefit from their opportunities to communicate and spread the knowledge of traffic widely within the society. The duty to control whether they observe broadcasting criteria or not was entrusted to Radio and Television Supreme Council (RTÜK). However, it was detected that both radios and televisions did not spare sufficient time to traffic training, and RTÜK did not fulfill its control function properly either. (Paragraph 3.3.1 - 3.3.8)

> ∗ *Topics, scope and criteria for every type of traffic training should be determined through coordination and cooperation of General Directorate of Security Affairs, General Directorate of Highways and Ministry of National Education (including RTÜK for radio and TV broadcasting). For studies on traffic training, application for their approval should be made compulsory. RTÜK's duty to supervise whether national, regional and local TVs/radios broadcast traffic-training programs and impose sanctions otherwise, should achieve functionality and continuity.*

Motor Vehicle Driving Course

24. Training provided at motor vehicle driving courses is not effective in training trainees as safe drivers in traffic. Curriculum of Motor vehicle driving courses, which were established first in 1987 to train motor vehicle drivers, to give certificate to successful candidates, and to provide traffic education and training, has not been revised and hence, does not meet today's conditions (Paragraph 3.4.1 – 3.4.4). With regard to driving courses, instead of teaching learner drivers what to do in every kind of traffic condition, merely how to start a car and drive on a straight road are thought. Moreover, courses are given at places without necessary infrastructure or those places are not used at all although they must be given at places qualities of which are arranged by regulation. (Paragraph 3.4.5 - 3.4.9)

25. Driving abilities of learner drivers are not fully measured at driving tests. Routes where driving tests are carried out are inadequate in respect of traffic signs and at the same time, do not have an infrastructure to measure driving ability of a learner driver. Hence, these tests are applied at improper routes in or outside the city. (Paragraph 3.4.10, 3.4.11) Timing of driving test does not enable a sound evaluation either.(Paragraph 3.4.12)

26. Motor vehicle driving courses are not controlled effectively. During controls, more often issues as physical conditions, office and personnel affairs of courses are considered. (Paragraph 3.4.13 - 3.4.17)

> ∗ *Number of motor vehicle driving courses should be proportioned to population in respect of settlement areas and be taken under control. In this way, motor vehicle*

driving courses become more functional educational establishment with high quality education.

∗ *Curriculum of motor vehicle driving courses should be revised in such a way that it meets today's conditions and covers all information required at every traffic condition. More focus should be placed on practical training rather than theoretical. In this way, learner drivers would learn what to do in every circumstance. Driving tests should be applied by qualified trainers at paths that enable evaluation of driver's ability at every road condition.*

∗ *Control methods that are to pave the way for more effective controls by primary school inspectors and District Directorates of National Education, should be developed.*

∗ *Scope and content of sanctions to be imposed to motor vehicle driving courses should be reconsidered in order to ensure target effectiveness of punishments.*

Planning of Traffic Controls

27. Planning of traffic controls is not based on measurable objectives and targets. Different characteristics of local circumstances are not fully taken into account and team activities are not effectively monitored. General Directorate of Security Affairs does not have short, medium and long-term objectives. For this reason, control programs prepared in order to plan the controls are not based on measurable objectives and targets and contribution of controls in the prevention of accidents or violations cannot be revealed. (Paragraph: 4.1.1. – 4.1.8)

28. Controls undertaken at provinces located on same routes are not conducted with coordination and cooperation. (Paragraph: 4.1.9)

∗ *General Directorate of Security Affairs should specify short, medium and long-term measurable objectives and targets, and internal controls for effective monitoring of team activities should be established on the one hand. On the other hand, all plans/projects conducted to this aim should be integrated under one "national traffic safety strategy".*

∗ *For increasing perceived risk of being caught and maintaining continuity in controls, a system should be established to conduct controls of traffic units active on the same route in a coordinated manner.*

Human Resources and Equipment Planning

29. In human resources planning, being a specialist in the field of traffic was disregarded in certain practices. Secondment of experienced personnel trained in the field of traffic and having worked for traffic units for long years is possible through approval of Governorships and Directorates of Security Affairs. On the other hand, senior personnel working as decision-makers for the provision of traffic services is not seek to have expertise in traffic branch. This leads to assignment of senior personnel authorized to take decision in the areas that they

do not have sufficient knowledge and experience and guiding decisions cannot be taken. (Paragraph: 4.1.11 – 4.1.13)

30. Training provided to traffic polices is inadequate. Traffic training cannot be provided at an optimum level due the fact that training courses are not organized at a center with sufficient equipments and infrastructure facilities and number of trainers is inadequate. (Paragraph: 4.1.14 – 4.1.16)

31. Whether the equipment allocated by General Directorate of Security Affairs to traffic units is effectively used during traffic controls is not monitored. On the other hand, it cannot be determined whether demands received from provinces are actual needs or not. Moreover, there are no specific criteria with regard to number of spares that should be kept in stocks of traffic units, and thus, available equipment is not in use. (Paragraph: 4.1.17 – 4.1.18)

32. An effective prioritization is not made in human resources and equipment planning based on risky regions in respect of traffic safety. When comparison is made between the number of passenger cars and radars, which have an important role in traffic controls, it is understood that no prioritization is made among traffic stations located at risky areas with strategic importance and those located at routes with less traffic accidents. Same situation applies to human resources planning as well. (Paragraph: 4.1.19 – 4.1.22)

- *Personnel at every level of seniority should have expertise in the field of traffic, and a system should be developed so as to give an assurance to personnel of working in their field of expertise.*
- *Human resources and equipment planning should be made through considering risks and priorities with regard to traffic safety.*
- *A training center should be established, which is equipped sufficiently together with its physical infrastructure, have specialized trainers and enables provision of practical as well as theoretical training.*
- *Inventory of equipments stored by traffic units should be kept so as to detect whether they are used actively. At the same time, specific criteria with regard to the number of equipment stored for urgent use should be set.*

Controls for Traffic Safety

33. Control points at provincial level are not selected according to scientific methods and by means of statistics. Hence, controls are carried out at usual points irrespective of target group. Additionally, risk of being caught perceived by drivers is declining and accordingly, effectiveness of controls is weakening. (Paragraph: 4.1.23 – 4.1.24)

- *Control models based on risk analysis concerning accidents and violations should b developed in order to carry out controls in the most effective way.*

Radar Speed Control

34. Radar speed limit controls are not continuous and effective. At provinces covered in on the spot audit, it was observed that a special analysis for detecting points with frequent speed limit violations was not made, and speed limit controls were in general made routinely at points that were known or anticipated by drivers. (Paragraph: 4.1.31 – 4.1.32)

35. Beltways, underpasses or road widening works undertaken to ease inner city traffic flow lead to high speed in traffic. This approach prioritizing vehicles rather than human has not only hampered applicability of speed controls within legal arrangements but it has also increased significantly risk of accidents resulting in deaths at settlement areas. (Paragraph: 4.1.34)

36. Transportation Coordination Center (TCC) and Provincial Traffic Commissions are authorized to re-determine maximum and minimum speed limits provided that they are within the limits specified in Highways Traffic Law. Within this context, at some provinces subject to on the spot audit, it was detected that speed limits at certain routes within cities were re-determined by TCC and Provincial Traffic Commissions contrary to limits specified in mentioned law. This has lead to different speed limits at different places and conflict in the designation of speed limit, which in turn can be a factor in the increase of accidents caused by speeding. (Paragraph: 4.1.35 – 4.1.36)

∗ *For effective radar controls at places dominated by speeding traffic, lay-by should be constructed at road sections where necessary. At the same time, during project phase of road constructions and road maintenance-repair works, those places where controls can be carried out safely should be taken into account.*

∗ *Sections of roads inside cities with speeding traffic should be detected, where computerized speed-measuring devices should be installed or for applying and mailing the ticket, license plate (or number plates) should be taken instead of informed controls. Moreover, all relevant institutions should act in coordination in order to find an optimum solution for speed violations on roads planned to be constructed. A human-oriented urban development should prevail since cities are constructed for the sake of people. Universities, NGOs, etc should actively support and participate in studies initiated with this approach.*

∗ *Computerized speed-measuring devices should be installed and spread, giving priority to speed-sensitive risky routes such as school and hospital areas or black spots.*

∗ *Use of luminous signboards placed at certain road sections in order to prevent speed driving should be made widespread.*

Breathe Testing

37. Technical incapacities and deficient practices in breathe testing decrease the expected effect. All breathalysers used for breathe testing are not devices with a special feature of printing out a sheet displaying date, time, test result as well as its serial number. At most province,

outdated breathalysers are still in use. Since they are old models or excessively used, they breakdown very frequently, which changes device's calibration. In addition to that, it was observed at most provinces covered within on the spot audits that in case of objection to the result of breathalyser, second measurement was made by healthcare centers by means of breathalyser again instead of blood testing. However, there are no equivalent technical devices and calibration of available devices are not made, which resulted in differences in results of measurements, cancellation of tickets and recovery of legal costs unnecessarily by the administration. (Paragraph: 4.1.37 – 4.1.40)

∗ *Breathalysers should have necessary technical equipment for proper testing and in case of objections; second testing should be done in blood so as to get the most sound result.*

Pedestrian Control

38. It cannot be ensured that pedestrians observe traffic rules, as sufficient attention is not given to pedestrian control. According to statistics of the last decade obtained from General Directorate of Security Affairs, approximately 21.7 per cent of people lost their lives due to traffic accidents are pedestrians. (Paragraph: 4.1.42)

39. Although it is stated in control program that pedestrians shall be forewarned at busy junctions and pedestrian subways, traffic teams do not control pedestrians through warning in order to ensure pedestrians acquire the habit of observing traffic rules. Drivers do not observe the rule saying "right to way at pedestrian crossings belongs to pedestrians" and traffic police do not have control over this practice either. (Paragraph: 4.1.43 – 4.1.48)

40. Despite the fact that in average 30.9 percent of total pedestrian deaths occurs outside settlement areas, pedestrian control is not included in the control programs prepared by General Directorate of Security Affairs for regional traffic units. (Paragraph: 4.1.49)

41. Another factor threatening pedestrian safety is that vehicles are parked commonly on sidewalks, which was observed at all provinces covered in on-site audit and forces pedestrians to use traffic way instead of sidewalks designated for pedestrians. However, due to various reasons, an effective control program has not been implemented for vehicles parked on sidewalks. (Paragraph: 4.1.50)

∗ *Principles of Charter of Pedestrians' Rights should be taken as basis for rearrangement of our control system in order to ensure pedestrian safety.*

Traffic Information System

42. Traffic Information System (TIS) aiming at modernizing traffic controls with technological opportunities cannot be used effectively. Geographical Information System as well as digital maps at provincial level necessary to get expected benefit from TIS, have not been drawn. Only a digital map covering the whole country was prepared. (Paragraph: 4.1.55)

43. To get optimum efficiency from TIS, key element is effective use of laptops. However, it was detected that as of 07.24.2007, out of 234, 98 laptops were sent to General Directorate of Security Affairs during 2005, 2006 and 2007 and kept there for repair, and 13 laptops were unserviceable. Moreover, it was observed during audits that most of the time, laptops were not used actively due to the facts that batteries did not last long, GSM network could not be established at every point or was interrupted, there were difficulties in integration of laptops to patrol cars, and traffic police preferred using wireless. (Paragraph: 4.1.56 – 4.1.60)

∗ *Effective use of TIS should be ensured. Deficiencies in terms of infrastructure and usage should be eradicated.*

Voluntary Traffic Controllers

44. Voluntary traffic controllers cannot fulfill their civil control function. Although meetings are organized twice a year to provide voluntary traffic controllers with necessary and up-to-date information on how controls should be performed, participation is low. (Paragraph: 4.1.61 – 4.1.63) Moreover, it is seen that number of tickets issued by voluntary traffic controllers has decreased by years. So far, no initiative has been taken by General Directorate of Security Affairs in order to eradicate all these defects. Besides, matters such as whether voluntary traffic controllers are alive or dead, changes in their residence addresses, whether they actively fulfill their duties considering their health or age status are not followed. Paragraph: 4.1.64 – 4.1.67)

45. Persons being a voluntary traffic controller are expected to behave diligently in traffic. Within this context, at provinces covered in on the spot audits, it was detected that at average 54 percent of voluntary traffic controllers has violated traffic rules at least once since first start of this practice. (Paragraph: 4.1.68 – 4.1.71)

∗ *Cooperation and coordination between traffic units and voluntary traffic controllers should be improved; system should be made effective and continuous to increase perceived risk of being caught by drivers.*

Collectibility of Traffic Fines

46. Traffic fines cannot be accrued and collected by tax offices in time. Only 40 per cent of traffic fine issued by General Directorate of Security Affairs between years 2002-2006 could be collected. Between these years, 2.031.675.013 YTL (New Turkish Liras) traffic fine was issued, 1.340.753.836 YTL of which was accrued and 817.132.924 YTL was collected. In other words, within a period of five years, only 1.214.542.089 YTL of the total amount of traffic fine could be collected. (Bkz. Paragraph 4.2.1-4.2.5)

∗ *Necessary technical and administrative infrastructure that is to enable coordination and cooperation between relevant institutions should be established for the*

communication of tickets to tax offices electronically within the shortest time. In this way, fines should be accrued timely and collection processes should be made faster.

Penalty Points

47. Penalty point application cannot be use as an effective tool to correct driving behaviors. Although penalty point (100) resulting in withdrawal of driving license and number of penalty subject to point (110) of Turkey are relatively higher than penalty points of other countries, penalty point given for offences committed is lower. Effectiveness of this application is decreased, since penalty point for traffic offences are low, while penalty point resulting in withdrawal are high as well as reaching threshold is limited with a period of one year. (Bkz. Paragraph 4.2.6 - 4.2.9)

∗ *Penalty point application should be rearranged through considering practices of other countries in such a way that it has deterrent effect over drivers and correct behaviors.*

Physico-technical Testing

48. Physico-technical testing (PTT) detects whether a driver is a safe driver in terms of his/her driving ability, personnel characteristics and physiological status. According to Implementing Regulation on Road Transportation, drivers carrying cargo and passengers at distances more than 100 km are obliged to receive a report indicating that they are physico-technically healthy once in every five years. However, expected benefit cannot be taken from PTT applied to commercial drivers due to delay in application. (Bkz. Paragraph 4.3.1, 4.3.5,)

49. Drivers whose mental health status is confirmed to be good after psychiatric examination can still drive a vehicle although their traffic physiology and ability are indicated to be unfavorable by PTT. (See Paragraph 4.3.8, 4.3.9, 4.3.10)

50. A control system that is to safeguard functioning of PTT centers according to their reason of establishment does not exist. There are no persons with technical and scientific expertise in the field of psychotechnics evaluation among those performing controls on behalf of Provincial Directorates of Health. That effectiveness of controls cannot be ensured results in irregular practices. (Bkz. Paragraph 4.3.11, 4.3.12, 4.3.13)

∗ *Reports received from PTT centers should also be confirmed by psychiatrist working for state or university hospitals.*

∗ *Drivers can only receive a report from PTT on condition that they receive positive results both from evaluation test and psychiatry examination.*

∗ *Provincial Directorates of Health should carry out controls in cooperation with relevant professional organization and develop control criteria in order to detect whether reports are issued duly.*

∗ *According to Implementing Regulation on Road Transportation, drivers carrying cargo and passengers at distances more than 100 km are obliged to receive a PTT report. Without limiting with distance, PTT report should be made obligatory for all drivers carrying cargo as well as passengers. Driving license for C, D and E classes can also be obtained on condition that drivers receive a PTT report. Furthermore, drivers that are to obtain a Professional Compliance Certificate should first receive a positive PTT report.*

∗ *The Ministry of Health should set criteria for controlled establishment of PTT centers at more provinces considering the number of drivers.*

Traffic Signage

51. Another important issue with regard to prevention of traffic accidents is the compliance of traffic signs to standards. It was detected that only in 2006, 11.154 accidents happened at locations where there were road-maintenance and repair works. Similarly, according to statistics for the same year, at 1.172 accidents, traffic lights were dysfunctional and 237 accidents occurred when ambient illumination was improper. Additionally, especially insurance companies have taken legal actions against General Directorate of Highways and Municipalities in recent years due to lack of signage. (Paragraph 5.1.3 – 5.1.7)

52. Existing standards with regard to vertical and horizontal pavement marking are not applied on highways. At some provinces audited on the site, it was observed at roads falling within the responsibility area of General Directorate of Highways and municipalities that horizontal traffic markings were rubbed out and not visible; pedestrians crossings and other roads were not marked especially inside the cities, and where there were markings, they were not visible because of being rubbed out or dirt over road. (Paragraph: 5.1.8 – 5.1.10)

53. Likewise, vertical marks have lost their reflecting feature due to dirt and wear, and become nonfunctional because of being shut, crashed, stolen and damaged. It was observed at some provinces that during road maintenance and repair works, temporary signs complied neither the marking project nor standards of General Directorate of Highways; signs without retroreflectivity were used and not located according to standards. (Paragraph: 5.1.11 – 5.1.13)

54. While there is a lack of signing at highways due to normal wear and tear as well as theft, it was detected that certain Regional Directorates of Highways were storing retroreflective signs which were not used when due and kept unused. Since retroreflectivity of materials kept in storages for long periods decreases, if used, they will not function properly. This indicates that needs have been planned and stocks have been managed improperly. (Paragraph 5.1.14)

55. In 2004, certain traffic signs were added to existing standards, some were excluded while symbols of some were changed within the framework of harmonization with international standards; however, public is not informed about these changes sufficiently. (Paragraph: 5.1.17 – 5.1.18)

56. Personnel in charge of application of traffic signage standards do not have sufficient training for this position. Most personnel working at traffic units of municipalities covered in this audit

activity do not have any special expertise in the field of traffic, and have not participated any course, seminar etc. either. It was seen that even there were officials working at traffic units of some municipalities who were unaware of “Traffic Signage Standards during Inner City Road Maintenance-Repair” published by General Directorate of Highways. (Paragraph: 5.1.19 – 5.1.20)

57. Although General Directorate of Highways is authorized in setting, publishing and controlling signage standards at all highways, it cannot fulfill its duty to control compliance of traffic signs with standards inside cities. (Paragraph 5.1.22 – 5.1.26)

- *Through establishing required coordination and cooperation between General Directorate of Highways and municipalities, training needs of municipal personnel with regard to traffic safety should be met. Likewise, control engineers working for General Directorate of Highways at units other than traffic units should be provided with in service trainings.*
- *Matters related to temporary traffic signs should be dealt with in especially road construction, repair and maintenance specifications and contracts. Duties, authorities and responsibilities should be clearly defined. Control on the compliance of marking projects with standards should be safeguarded and criminal sanctions should be imposed effectively.*
- *General Directorate of Highways and other institutions should cooperate with NGOs active in this field and conduct studies towards informing all segments of society about traffic signs and changes made in time by using communication tools.*
- *General Directorate of Highways should fulfill its duty to ensure compliance of traffic signs to standards in the most effective manner. Needs planning and stock management should be done in such a way that it would prevent inefficient practices.*