Implementation Plan Priorities

To

Reduce Road Accidents in Greece

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A. Introduction

This is a companion document to a previously released document titled «Πρόταση Συνδρομής στο Πρόγραμμα Βελτίωσης της Οδικής Ασφάλειας στην Ελλάδα». In the first document we highlighted the need to establish a strong Central Authority that will be given responsibility for executing the project of reducing traffic accidents in Greece. We also stressed the need for the development of a comprehensive Implementation Plan that integrates the actions that the various ministries and local governments must implement.

This document titled “Implementation Plan Priorities, to Reduce Traffic Accidents in Greece” addresses elements of the Implementation Plan. The chart below shows the various steps that need to be taken so that we can arrive at a master Implementation Plan and companion plans at the various ministries. This document addresses the two boxes highlighted in blue, i.e. the identification of the short-term and long-term priorities and the discussion of the various processes that impact each priority. It will be the responsibility of the Central Authority to complete all the steps leading to a solid Implementation Plan.

The processes supporting each priority are inter-related, which suggests that implementing one process without the other will not produce the desired results. Each of these processes will have to be studied in detail to make sure that all of its aspects are captured in the Implementation Plan.

The Central Authority will have to create a Command and Control Center with responsibility to coordinate actions, to follow up progress and provide guidance, to approve projects on a fast track basis (in the same manner as the Athens 2004 projects are currently approved). Greece is so far behind in matters related to road safety, and time is so short before the Athens 2004 Olympics, that extraordinary measures will have to be considered by the government to facilitate taking quicker decisions outside the normal bureaucratic procedures.
The team assigned the responsibility of developing the Implementation Plan should consider the following:

- The priorities and related processes included in the plan should be based on hard data and scientific evidence. A benefit/cost analysis should be done on every single recommendation to ensure that the most efficient actions are implemented first.
- The Strategic Plan developed recently by the National Technical University (NTU) of Athens could be used as the foundation of the Implementation Plan.
- An effort should be made to integrate the views of the many constituencies involved in this area (insurance companies, motorcycle associations, taxi and truck associations, educational and research centers, Athens 2004 Organizing Committee, government agencies, etc.). A “consensus” Plan has more chances of being accepted by the citizens of this country.
- Best practices from Greece and other countries should be sought and, to the degree possible, integrated in the plan.
- A dedicated multi-disciplinary team from the various ministries should be given the responsibility to develop the Plan under the direction of the Central Authority.

There is a generally held view that the poor safety record on Greek roads is primarily due to the lack of financial resources. The argument may be true in matters related to infrastructure, but the lack of money is not impacting many of the other factors that are contributing to road accidents in Greece. However, there is no doubt that additional financial resources will be needed to implement corrective measures, and it will be the responsibility of the Central Authority to properly assess the level of additional resources needed, as well as identify potential new sources of revenue. The fines that could be collected by a more dedicated application of the KOK could provide significant and needed revenues in the area of road safety. In Greece thousand and thousand of violations go unchecked and unpunished. While the main objective of stricter policing is to dissuade people from taking risks and endangering themselves and others, we must be up front with our citizens and let them know that stricter policing will generate additional revenues that will be recycled to finance road safety programs and save more lives.

The potential additional revenues from stricter policing are considerable. For example, a single “busy” speeding camera can generate revenues up to €13 million per year (30 violations per hour, average fines of €50 per violation). The original investment for a modern digital camera, which varies from €30,000 to €40,000, can be amortized within months. It is estimated that Greece would need to install around 5,000 cameras to discourage drivers from speeding and from violating red lights and stop signs (the UK which has one of the safest records in Europe has installed 4,000 such cameras).

The investment to install all these cameras is significant (€175 million), but so is the expected annual revenue generated by these cameras (in the first years, anywhere between €500 million to €1 billion per year).

However, it would be politically and ethically incorrect to divert these funds into the general treasury, reinforcing the impression that the state “wakes up” when it is in dire need of replenishing its empty coffers than saving lives. We recommend the creation of a road safety fund dedicated to financing road safety programs. This fund should collect and dispense funds and should be under the responsibility of the Central Authority. The fund will provide more stability and consistency in the revenue stream, thus allowing better long range planning.
The Greek roads have been unsafe for a long time and it will take some time to reverse the situation and bring Greece at par with the best performing countries in Europe. The state has tolerated wrong behaviors for years, which means that a sudden shift in strategy and tactics, without a preemptive awareness and information campaign, will confuse and anger the citizens of Greece. This awareness campaign should be followed by a grace period to give time to everyone to accept the facts and adjust. Following the grace period, the state should make it clear that it will no longer tolerate violations of the KOK. A zero tolerance policy should prevail.

Of course, for the citizens to consistently respect the law, they must feel that the state respects them as well. This is why it is so important that the state properly maintains roads, adequately train the traffic police, clamp down on corruption, etc. Unless the state becomes more open and responsive to the needs of the road users, nothing of lasting value will be achieved. Expecting faithful obedience of the rules of the KOK only through more intense policing on the roads, without addressing infrastructure and other administrative weaknesses, is utopia. Greek society will just not accept having to pay more fines for a system that is broken, corrupt, and disorganized.

In the following sections of this report we present a suggested list of short-term and long-term priorities. We have based this list on the various studies conducted and documents produced in Greece over the last few years. Each short-term priority is then analyzed to reveal the inter-related processes that need to be addressed during the evaluation and implementation phases.

We are not addressing the long-term priorities in this report. This can also be done if the government shows interest in pursuing the recommendations of this report.
**B. Priorities**

**Short-term priorities** cover a period of up to 2 years and include some measures that must be addressed even before the start of the Athens Olympics on August 13, 2004. It is reasonable to expect that most short-term measures deal mostly with better enforcement of the KOK rather than significant changes in the infrastructure or the administrative environment.

**Long-term priorities** deal in the majority with infrastructure improvements and administrative reforms, and as such require more significant investments and time.

The short-term and long-term priorities identified below are backed up by scientific evidence and have been suggested by the Strategic Plan developed two years ago by the National Technical University of Athens.

**Short-Term Priorities:**
1. Reduce speeding.
2. Enforce the wearing of safety belts and motorcycle helmets.
3. Reduce the frequency of individuals driving under the influence of alcohol/drugs.
4. Reduce the violations of red lights and stop signs.
5. Reduce the incidents of illegal overtaking (crossing the double lines and overtaking from the right for cars and motorcycles, and weaving through traffic for motorcycles).

**Long-Term Priorities:**
**Infrastructure**
6. Address the country’s black spots.
7. Improve the road maintenance processes (potholes, lane markings, signs, etc.).
8. Resurface roads with less slippery asphalt.
9. Replace sections of the network that no longer meet modern highway design and safety standards (blind spots, lack of passing lanes, etc.).
10. Improve road signs (standardize the signs and their location).
11. Improve lighting where appropriate.
12. Construct additional parking spaces in urban settings to decongest roads from parked cars.
13. Construct safe pedestrian crossings, where appropriate.

**Administration**
14. Reform the KTEO.
15. Reform the driver licensing system.
16. Train public officials on matters dealing with traffic (traffic police, judges, prosecutors, etc.).
17. Simplify the KOK.
18. Reform the process that deals with data gathering and analysis at the site of an accident.
19. Reform the entire judicial process (including the investigative phase).
20. Introduce fixed stations for measuring the weight of trucks and for conducting inspections on their speed control and speed limiting devices.

**The Driver**
21. Introduce safety driving centers for repeat offenders, or those wishing to improve their skills and lower their insurance rates.
22. Activate the driving school parks (safe driving) for children.
23. Prohibit holding a mobile phone while driving.
C. Short Term Priorities

1. Reduce Speeding

It is no secret that Greek drivers ignore speed limits and in general drive too fast. It is also a fact that speeding is the major cause of accidents in Greece. But, to reduce speeding one has to address several issues at the same time. The natural instinct is to believe that stricter policing, i.e. catching every single offender and slapping ever-higher fines will solve the problem. This has been tried before in Greece and abroad with limited success. The reasons that propel drivers to drive fast and take unnecessary risks are numerous and complex. The solution to the problem is equally complex.

The graph below shows the various issues or processes that influence speeding and need to be assessed in terms of their benefit/cost impact. A general overview of each one of these processes lead to specific recommendations that need to be further evaluated:

1.1 Correct Speed Limits

**Background:**
Many of the speed limits in Greece are simply wrong. For example, there are road segments with a limit of 50 km/hour, yet drivers can and do drive safely at 80 km/hour. We also see signs in construction zones of 30 km/hour, when it is perfectly safe to drive at 50 km/hour.

It makes no sense to fine someone going over a speed limit if we know that the speed limit is wrong. Speed limits must have a relationship with the highway design specifications and environmental conditions and establish that driving over the speed limit is just not safe. Arbitrary speed limits that are not credible can cause a bigger problem if users no longer take
them seriously. Ignoring a correct sign can, of course, imperil the life of the driver as well as other innocent people.

The Greek press has reported that a crew of reporters conducted a test to determine how long it would take to drive from Athens to Thessalonica within the posted speed limits. They found out that the trip would take over 18 hours. Everyone knows, including the traffic police, that the trip from Athens to Thessalonica usually takes about 6 hours. This means that people are making a mockery of the posted signs.

The Ministry of ΥΠΕΧΩ∆Ε and the local municipalities have specified wrong signs on the grounds that if a particular road segment is unsafe, given that an accident may have occurred in that spot, then lower speed limits are in order. Many times the signs are introduced on the basis of a request from the traffic police following an accident on site. There is an argument that the lower speed limits are introduced to protect the state and its employees from legal action in case of an accident. Sometimes the real cause of an accident may very well be the poor infrastructure, but so long as the driver was speeding, the responsibility of the state is difficult to prove.

Lower speed limits may influence a few obedient drivers who philosophically always respect the signs, whether the signs are correct or not. But the great majority of the drivers simply ignore speed signs because they know the signs are wrong and have no relationship with reality. In summary, the state chooses to ignore the real causes of traffic accidents and instead of fixing the problem it chooses to lower the speed limit, a cheaper measure but one that is quite ineffective and even dangerous.

The Greek state uses the whole spectrum of speed signs from 10 km/hour in construction zones up to 120 km/hour in highways (10 km/hour, 20 km/hour, 30 km/hour, 50 km/hour, 60 km/hour, 70 km/hour, 80 km/hour, 90 km/hour, 100 km/hour and 120 km/hour). When one drives on Greek roads it is difficult to remember the applicable speed limit at any time, given that the limits change so often and are not standardized. The problem gets worst as in many instances the state forgets to post signs to reinstate the higher speed limit, once the slower zone has been passed.

Standardize Speed Limits:
Greece should standardize speed limit signs across the country to 5 levels:
- 120 km/hour in limited access highways,
- 100 km/hour in normal highways,
- 80 km/hour in suburban roads and major trunk roads in urban areas,
- 50 km/hour in urban roads,
- and, 30 km/hour in front of schools, old people homes, hospitals, etc.

In construction zones, the normal applicable speed limit on that road should be lowered to the next lower speed limit (an 80 km/hour road to 50 km/hour, and so on)

Segments of roads requiring lower speed limits, because of the design or environmental conditions, should either be improved or lower speed limits should be posted. But the cases where speed limits are reduced should be the exception to the rule. The state should do everything possible to improve highway design to allow continuous and steady speed/flow throughout the network.

This strategy can be implemented rather quickly (6 months) and we suspect not at an exorbitant cost. Huge signs would need to be posted at major entry points of major roads to inform drivers that the entire segment is 80 km/hour (for example, the road from Faliron to
Sounion will be posted as an 80 km/hour zone, except in urban areas, such as Kalamaki, Glyfada, Varkiza, Saronida and Anavissos, where it will be dropped to 50 km/hour. A few additional signs would have to be posted intermittently to remind drivers of the standardized limit.

In urban areas where the speed limit is 50 km/hour, such as in Athens or Thessalonica, the convention could be that if there are no signs, the speed limit remains 50 km/hour. This will be widely communicated through the media to the entire population.

It is evident that this strategy might initially result in an increase of the average driving speeds throughout the network. Normally, an increase in driving speeds would generate additional accidents. However, if the new speed limits are religiously enforced with a zero tolerance policy, we believe that accidents would drop off dramatically. On balance it is better to have the correct speed limits (even if they are higher) and enforce them, rather than have wrong signs that nobody respects.

All older signs that are no longer relevant, including commercial signs by the side of the road, should be removed. It will no longer be acceptable to see wrong signs, or signs that have faded, or are posted behind trees and other obtrusive objects.

**Maintenance of Signs**

One of the most troubling areas on Greek roads is the poor state of road signs. Signs are placed in the wrong location, have faded with time, are obstructed by trees or other objects, are missing, are not consistent in terms of their size, typeface or colors, etc. The reasons for this poor state of affairs are well known (financial constraints, poor training, conflicting roles/responsibilities, weak local administrations, lack of proper follow up and accountability, etc.).

To solve this difficult problem the following actions will have to be considered:

- The proper maintenance of signs should become a priority. Today it is not.
- Insist that ΥΠΕΧΩ∆Ε, the local municipalities and the contractors follow religiously the sign manual (which specifies the correct size, color, location, etc. of a sign) when placing a new sign or maintaining an old one. Any deviations from this manual will be punished.
- Internal processes will have to be developed to monitor signs that need maintenance. Notification that a sign needs work should come first from the staff of the ministry or municipality responsible in that area. But, municipal bus drivers, the police, garbage collectors should be also given the responsibility to alert the maintenance office whenever they notice something wrong. Furthermore, a central telephone number for all of Greece should be made available for citizens to call in and tip off the authorities. **Signs should be fixed within 48 hours of notification** (a wrong or missing sign can cause an accident).
- Adequate financial resources should be made available to properly maintain signs. A special **road safety fund** that collects revenues from fines and other car-related taxes could partially be used to improve the maintenance of signs.

All commercial signs posted on the side of the road that distract the drivers should be removed. Many of these signs are illegal and all it takes to remove them is to apply the law.

Whenever there is an accident and a sign has been damaged, the police and the drivers involved should inform the appropriate authorities. Failure to do so would entail stiff penalties. **Furthermore, the cost to replace the damaged signs should be borne by the driver found guilty of an infraction.** This is standard practice in most other European...
countries. It is well accepted in these countries that whenever someone damages public property, he or she should be responsible to fix it. This should be introduced in Greece in the shortest possible time.

**Actions required:**
The following actions are indicative only and are presented as a guide. The final list of actions will be at the core of the implementation plan and will be developed by responsible teams from the appropriate ministries and local authorities.

<table>
<thead>
<tr>
<th>Ministry of Transport</th>
<th>1.1.1.</th>
<th>Include provision in the KOK stipulating that the cost of replacing damaged signs should be borne by the driver found guilty. Drivers should notify voluntarily the authorities of damages they have caused, regardless of ultimate responsibility. Failure to do so will trigger stiff penalties.</th>
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<td>1.1.2.</td>
<td>Develop internal processes for bus drivers to notify the appropriate authorities when a sign has been damaged or is missing.</td>
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<td>ΥΠΕΧΩ∆Ε</td>
<td>1.1.3.</td>
<td>Inform the public that the current speed signs throughout Greece will become void in 6 months and will be replaced by 5 standardized speed limits.</td>
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<td>1.1.4.</td>
<td>Identify areas where a lower speed limit is necessary. Develop a plan to eventually upgrade the design/infrastructure at that location to allow for continuous speeds/flow.</td>
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<td>1.1.5.</td>
<td>Develop a list where the new signs will have to be posted and specify the total cost (production and installation).</td>
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<tr>
<td>Traffic Police (Ministry of Public Order)</td>
<td>1.1.6.</td>
<td>The police should be given the responsibility to notify the appropriate authorities when a sign needs maintenance.</td>
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<td>1.1.7.</td>
<td>The police to notify the appropriate authorities of the name of the driver that has damaged a sign, as well as relevant details to allow for a proper assessment of damages and circumstances.</td>
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<tr>
<td>Parliament</td>
<td>1.1.8.</td>
<td>Create special <strong>road safety fund</strong> to finance road safety programs. Fund will be primarily based on fines collected on Greek roads and by a portion of automobile taxes (gasoline, registration, etc.).</td>
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<td>1.1.9.</td>
<td>Create a Central Authority within ΥΠΕΧΩ∆Ε or The Ministry of Transport to execute the Implementation Plan, to oversee the road safety fund and to disburse funds to the ministries and local municipalities.</td>
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<tr>
<td>Ministry of Interior</td>
<td>1.1.10.</td>
<td>Ensure that the local municipalities dedicate sufficient funds for the proper maintenance of signs.</td>
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1.2 Train the Police.

Background
There is general agreement that the traffic police officers are not always looking out for speeding violators, even though speeding is the primary cause of accidents in Greece. One often sees policemen directing traffic during peak hours, or facilitating access for VIPs, or writing tickets to cars parked illegally but no policemen can be found at night or on busy streets, where many accidents occur.

Anyone involved in an accident in Greece knows that the police report on the site of the accident is often found to be inadequate. Drivers are not always given an alcohol test and the report on the circumstances surrounding the accident is not always complete.

Inconsistent policing is probably caused by many complex factors:

- Inadequate resources in personnel and infrastructure (not enough police cars and motorcycles).
- Poor management training for the leaders of the police force.
- Poor training of the police force on traffic issues affecting accidents (for example no safety driving training is offered, not even a simple driving license is required to become a traffic policeman).
- No implementation plan within the traffic police, no follow up and no accountability for results.
- Policemen are switched over from traffic to other responsibilities throughout their career. There is no permanent traffic police force.

Actions required:

<table>
<thead>
<tr>
<th>Traffic Police (Ministry of Public Order)</th>
<th>1.2.1 Traffic police personnel must have a valid driver license and must acquire skills in the following areas:</th>
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<tbody>
<tr>
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<td>• Safety driving.</td>
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<td>• How to correctly complete an accident form at the site of an accident.</td>
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<td></td>
<td>• How to behave politely but firmly in situations of crisis and tension.</td>
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<td></td>
<td>• The rules of the KOK and some basic legal issues.</td>
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<td></td>
<td>• How to “defend” a police report in court.</td>
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<td></td>
<td>• How to administer an alcohol test (or detect the presence of alcohol and drugs).</td>
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<tr>
<td></td>
<td>• How to conduct a thorough inspection of a truck or a bus (weight, loading, general condition of the vehicle, etc.) and how to detect fraudulent tampering of speed-limiting and speed-recording devices.</td>
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<td>1.2.2</td>
<td>Traffic police officers must be tested on their knowledge of the KOK every two years.</td>
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<tr>
<td>1.2.3</td>
<td>Traffic Police officers must understand the causes of road accidents and must have access to the monthly and yearly accident statistics.</td>
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1.3 Driver License.

Obtaining a driver’s license in Greece is relatively easy. It is widely reported that for a few € one can pass the exam the first time. Apparently, the driving schools have contacts with specific examiners who are “on their payroll” to help the school’s students pass the exam. Everyone is at fault here: the student, the school, the examiners and the state for not having done enough to stamp out corruption. It is important to properly test new drivers and to grant licenses only to those that have the skills to drive safely an automobile. **Placing drivers behind the wheel who do not have the skills or the maturity is absolutely criminal.**

Another weakness of the Greek licensing process is that licenses are valid until the age of 65. There are no intermittent exams to test the driver’s knowledge of the KOK, nor any safety-driving classes for repeat violators of the KOK or for drivers who have caused an accident. Drivers over 65 years of age have to pass a medical exam every three years but not a driving test. But even this process has been corrupted and it is reported that one can get the medical test done via proxy.

The exams for taxi, bus and truck drivers should be, but are not in practice, more elaborate and comprehensive. Truck drivers should also be tested on properly loading and maintaining their vehicles.

Young drivers cause more accidents in Greece in proportion to their numbers. The causes are multiple, but in general it is accepted that young drivers are inexperienced and take more chances (driving fast or under the influence of alcohol). The state must take measures to improve the knowledge and ability of younger drivers. The government of New South Wales in Australia (Sydney) has introduced a graduated licensing scheme to ensure that novice drivers demonstrate improved skills and maturity before graduating through the stages of driver training and licensing. Under this scheme, new drivers will be required to step through three novice stages during a period of 3 ½ years, before progressing to an unrestricted license. Graduation to the next stage will depend on passing a test.

The New South Wales model has four tests:

- Knowledge Test (computer-based)
  - Minimum driving period 6 months
  - Must be accompanied by a fully licensed driver
  - Must have attended a minimum hours of driving lessons
  - Speed limit 80 km/hour

- Driving Test
  - Minimum driving period 12 months
  - Speed limit 90 km/hour

- Hazard Perception Test (computer-based)
  - Minimum driving period 24 months
  - Speed limit 100 km/hour

- Driver Qualification Test (practical and computer-based)
  - Unrestricted license – speed limit 120 km/hour

It would appear that the New South Wales model is perhaps more elaborate and costly to what we could hope to see implemented in Greece. Nevertheless, it would be worthwhile to assess how well the process has worked in Australia and draw lessons that can be applied in Greece. The concept of graduating licensing is appropriate and appealing.
Actions Required:

| Ministry of Transportation | 1.3.1 | In the short term, take measures to stamp out corruption in granting new licenses.  
|                           |      | • Introduce computer-based theoretical exams to remove subjectivity and human interference.  
|                           |      | • Revoke the license of a driving school if caught attempting to bribe.  
|                           |      | • Dismiss an examiner who is found to have received a bribe.  
|                           |      | • Impose stiff penalties to potential drivers who are caught bribing (for example, impose a moratorium of two years before candidate can reapply for a license, in addition to issuing a citation and collecting the applicable fines).  
|                           | 1.3.2 | Identify weak spots of the current system and introduce corrective measures.  
|                           | 1.3.3 | Study the graduated licensing scheme of New South Wales, or other such relevant schemes, and adapt the best practice in Greece.  

1.4 Insurance.

The regime under which the insurance companies operate in Greece in the area of automobile insurance is not conducive to reducing accidents. There are some major issues that need to be addressed:

- Insurance companies are obliged by law to insure the car and not the driver. This is an oddity not seen in other European countries. The result of this policy is that there are no historical records for drivers and no penalties for careless or dangerous drivers who have caused accidents or who have been fined. Another consequence of this absurd policy is that young drivers pay exactly the same insurance rates as older drivers with the same driving record. Insurance rates are reduced from one year to the next if the driver has not been involved in an accident.

- Insurance companies are reluctant to apply the contract in case a driver or passengers are caught not wearing safety belts or helmets. The contract stipulates clearly that the insurance company can reduce payments in these instances.

- Insurance companies do not provide any incentives to drivers or companies that commit to wearing safety belts and helmets.

- There are insurance companies in the market that border the limits of illegality. They offer low rates but have no intention of fulfilling their obligations in case of accidents. They either go out of business (artificially) or delay payments.

Insurance rates in Greece are high, yet the insurance companies claim that they do not earn money in this sector. It would appear that a comprehensive study needs to be done that would recommend fundamental changes to how this industry operates. The guiding principles should be:

- Lower insurance rates.
- Incentives for safe driving behavior.
- Lower litigation costs through a more prevalent use of no-fault insurance.
• More effective administrative processes to handle accident cases and insurance claims (inspection and assessment of damage, image transferring devices, collection of insurance rates and payment of insurance, etc.).

Actions required:

**Insurance Industry:**
- Association of Greek Insurance Companies
- Association of Greek Insurance Agents

| 1.4.1 | Insurance companies to apply the insurance contract as written and not cover all expenses for drivers not wearing safety belts and helmets. They should of course inform their customers that after a grace period they would stick to the contract. These measures will surely influence drivers not to drive too fast, and encourage them to wear safety belts and helmets, otherwise they run the risk of not being fully covered in an accident. |
| 1.4.2 | Insurance companies should develop packages of lower insurance rates for private companies that develop internal processes to compel their employees to drive within the speed limits and to wear safety belts and helmets, when driving company cars and motorcycles. |
| 1.4.3 | Insurance companies to submit a comprehensive study with their suggestions on how we can significantly improve this sector of the economy (including changing the law to allow the insurance companies to insure the driver and not the vehicle). |

**1.5 Speed Limiting Devices**

Trucks and buses in Greece frequently drive over the speed limits allowed in the KOK for these vehicles. To dissuade truck and bus drivers from going over the speed limits, the police are using radar controls, which as we know are infrequent. The law requires that trucks and buses be fitted with speed limiting and speed recording devices. The KOK specifies when and where buses and trucks should install these devices. Most buses and trucks comply with the law but only on the surface. Many in Greece (and abroad) tamper with these devices in order to successfully pass police spot controls and inspections. The only way to control this type of fraud is to have more frequent and very thorough spot inspections, while at the same time impose high punitive measures for truck owners, truck drivers and for the garages tampering these devices.

**Actions Required:**

| Traffic Police (Ministry of Public Order) | 1.5.1 | Train police officers on how to conduct thorough inspections of trucks and buses to spot any tampering of devices. |
| 1.5.2 | Increase the frequency of spot inspections and controls, specifically for buses and trucks. |
Ministry of Transportation

1.5.3 Review levels of fines and other punitive measures to determine whether they are sufficiently high to dissuade fraud. The highest penalties should be directed at the owners of the trucks and should include longer periods of quarantine for the vehicles.

Associations of Truck and Bus Drivers

1.5.4 Request from the professional associations representing truck and bus drivers to assume their responsibility and contribute in educating and training their members. These associations should also help the state to introduce more effective counter-measures against fraud (given that they are very much aware of what is available in the market to tamper with devices).

1.6 Radar Detection Devices.

The Greek traffic police utilizes unmarked patrol cars and hand-held radar guns to catch speeding drivers. In most other European countries, the police have installed a large number of fixed cameras to dissuade drivers from speeding and going through red lights. A police patrol with a hand-held camera is not an efficient process to catch speeding drivers. Every infraction occupies two policemen and it takes about 15 minutes for the policemen to complete the forms and discuss with the driver the circumstances surrounding the infraction. A police car costs the state about €150,000 per year, if one considers the amortization of the vehicle, the salaries and benefits of the 6 member crew (3 shifts), the fuel to keep the vehicle on the road, etc. The revenue that a police car can generate is limited to about €1 million per year (assuming 3 tickets per hour, and fines averaging €50 per ticket).

A hand-held camera is clearly inferior to a fixed radar camera. First of all, the car and driver are caught on camera, thus eliminating subjectivity and the potential for erasing the fine (corruption). Furthermore, a fixed camera can catch more violators per hour and generate more income for road safety programs. Finally, the presence of thousand fixed cameras is an effective way to dissuade drivers from driving fast.

In several countries in Europe and the USA, citizens have created associations to protest the use of fixed cameras and help people avoid them by issuing bulletins with the location of the cameras. These associations argue that it has become suffocating not to be able to take a ride without risking a ticket even for minor excesses of the speed limit. They also argue that the cameras are not placed in locations which are dangerous, but rather on perfectly safe roads, implying that the state is not only interested in dissuading drivers but also generate income. The various states have responded to these concerns by raising the margin at which the camera is triggered to take the picture (in some cases 20% above the posted speed limit). Furthermore, warning signs are placed before the zones where cameras have been installed to alert drivers of their presence.

The Greek Police has made numerous statements lately that they intend to increase the level of vigilance on the roads and that their objective is to convince Greek drivers that all violations will be caught. This ambitious statement cannot be achieved without the installation of thousand fixed cameras, supported by patrols with conventional and unmarked...
police cars. If the government fails to install additional cameras, the police pronouncements will fall in the vacuum and they will once again loose their credibility.

The installation of fixed cameras is of the highest priority in view of the Olympic games. Perhaps there is no time left to complete a comprehensive study that covers all of Greece, but there is still time to install cameras in and around Athens and in some of the major trunk roads that visitors (during the Olympic games) and the Greeks will use.

**Actions required:**

<table>
<thead>
<tr>
<th>National Commission on Road Safety</th>
<th>1.6.1</th>
<th>The National Commission on Road Safety to secure the political and financial backing of the various ministries to install thousand of speeding and red light cameras. As mentioned earlier, the installation of thousand of cameras will require significant state funds but the payback period from the collection of fines is very short indeed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministries of Public Order, Transportation</td>
<td>1.6.2</td>
<td>The Ministry of Public Order and the Ministry of Transportation to conduct a study to determine the number of cameras needed and their optimum location throughout Greece (based on the location of black spots and other areas where it is important to dissuade drivers from driving above the speed limit). The two ministries should proceed to develop an implementation plan.</td>
</tr>
<tr>
<td>The Ministries of Public Order, Interior (representing the local municipalities), and Justice (responsible for the appeal and point system)</td>
<td>1.6.3</td>
<td>The three Ministries to ensure that they have the adequate organization and processes in place to handle a significant increase in traffic fines.</td>
</tr>
</tbody>
</table>

**1.7 Level of Fines.**

The applicable fines for every single infraction of the KOK are clearly specified in the KOK. These fines are very light when compared to the fines imposed for the same infraction in other European countries. Some differences are understandable given the difference in disposable income between Greece and the more developed economies of Europe. But, many have argued that the level of fines in Greece is so low that it does not dissuade or bother anyone from going over the speed limit. Furthermore, the point system has collapsed in Greece, which means that repeated violations do not trigger higher penalties, as is the case in the rest of Europe.

Another weakness of the system is that fines are the same whether one violates the speed limit at night, weekends or in construction zones. Several countries vary the fines in areas of higher risk. For example, many states in the USA triple the fines after 1:00 AM or during holidays. This measure would be effective in Greece given that a disproportionate higher number of
accidents do take place during the night and during holidays when a large percentage of the population is on the move. Many of these accidents are caused by high consumption of alcohol and by younger people who do not regard the consequences of been caught particularly painful.

Other countries raise the fines in construction zones to protect the workers. This measure could also prove to be helpful in Greece where detours and sign posting around construction zones are executed poorly.

### Actions required:

<table>
<thead>
<tr>
<th>Ministry of Transportation</th>
<th>1.7.1 Evaluate the entire package of fines used by the most successful countries in Europe to dissuade their drivers from violating the rules of their own KOK, and adapt them for Greece.</th>
</tr>
</thead>
</table>

### 1.8 Appeal Process.

Drivers who have allegedly violated a rule of the KOK and who have been issued a citation can in the first instance appeal the fine with the traffic police and ultimately in court. Citizens often find themselves in court to settle claims and counter-claims resulting from an accident. Appealing a citation with the traffic police, the same institution that issued the citation creates a conflict of interest situation. Forgiving a fine in the appeal process would imply that one traffic police officer judges that another officer made a mistake and did not take into account all relevant factors. This is difficult in practice. On the other hand, following up the case in court has some serious weaknesses:

- It can be costly, as one always needs the services of a lawyer.
- It is time consuming and slow as the courts are overwhelmed with thousand of pending cases.
- The judges are not experts in road safety matters and decisions tend to reflect the prevailing culture (judges are drivers too!!!) rather than a strict interpretation of the law.

Switzerland has introduced an innovative scheme that is keeping many appeals and disputes from reaching the courts. The Cantons have created an administrative office staffed with traffic experts who would listen to the arguments of citizens against a citation or the police report at the site of an accident. Sessions with the experts are booked in advance (so that the expert can assess the file), they are strictly confidential and they are free. The experts assess the relevant factors and advise the citizen of the best course of action. For example, they would advise someone not to proceed in court because the case is rather weak and the financial implications could be higher than paying the fine right away (loosing a case triggers administrative fees in addition to the fine). The experts might offer to talk to a traffic judge, off the record, to seek a second opinion. One does not have to follow their advice and can proceed any way it sees fit. The experts bear no responsibility related to the advice they offer, as it is strictly a recommendation.

This process is very effective to keep costs down and to speed up the resolution of cases under dispute. The dialogue with the experts is non-confrontational as they do not make any decisions nor do they take sides. They are there to examine the facts and offer an expert opinion to those that seek it. One can always hire a lawyer and go directly to court.
Unfortunately, lawyers often recommend a more aggressive and risky course of action as they seek more business.

**Actions required:**

<table>
<thead>
<tr>
<th>Ministries of:</th>
<th>1.8.1 The three Ministries to study the Swiss model to handle appeals through an administrative process first, to determine its applicability in Greece. Perhaps other reforms can be considered that would help make the appeal process more professional, less costly and faster.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Order, Transportation, Justice</td>
<td></td>
</tr>
</tbody>
</table>

1.9 **Training of Judges.**

Judges, prosecutors and lawyers receive no specialized training in traffic and safety matters. As a result their skills in this area do not go beyond having a valid traffic license. They do acquire experience by handling traffic matters in court, but this experience does not blend with an academic and rigorous understanding of the causes of technical circumstances of an accidents. Furthermore, verdicts in court follow, in all likelihood, the accepted norms of driving behavior. The Greek judges and prosecutors at their October 2003 annual convention in Agrinion and Nafpaktos recommended several measures that if adopted would reduce traffic accidents.

Other experts have mentioned most of what the judges and prosecutors have recommend, but one recommendation in particular is quite intriguing. The judges are asking for the state to establish a task force of experts to assist the judges better assess technical issues related to traffic accidents (σε τεχνικά θέματα και προσαρμογή της νομοθεσίας στις πάγιες θέσεις της νομολογίας).

While one can only applaud the recommendation because it will fill a vacuum that exists today, one wonders why it has taken so long for the courts to accept that they do not have adequate training in traffic matters and also how many decisions the Greek courts have made all these years that were wrong and unjust.

**Actions required:**

<table>
<thead>
<tr>
<th>Ministries of:</th>
<th>1.9.1 The Ministries of Transportation, Public Order and Justice should evaluate the recommendations made by the Greek judges and prosecutors and offer countermeasures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Order, Transportation, Justice</td>
<td></td>
</tr>
<tr>
<td>1.9.2</td>
<td>Introduce specialized training for lawyers involved in traffic matters. This training could be incorporated in the curriculum of law schools and/or could be offered in terms of post-graduate seminars to practicing professionals.</td>
</tr>
<tr>
<td>1.9.3</td>
<td>Establish a task force to advise judges in technical matters related to accidents (as they have recommended).</td>
</tr>
<tr>
<td>1.9.4</td>
<td>Examine the Swiss model of establishing an administrative office to advice citizens of the best course of action (see section 1.8).</td>
</tr>
</tbody>
</table>
1.10 Collection of Fines.

Fines today are paid in municipal offices across Greece. There is a lot of human intervention in the process and as a consequence there are plenty of opportunities for corruption (erasing of fines or even bribery). Many of the fines go uncollected for many years without any significant repercussions for late payment. And, citizens often voice their anger at the employees whose job is merely to receive payment of a fine, and who are not responsible to not evaluate the merits of the case. The entire process could be reformed to make it more professional and less costly to administer.

Actions required:

<table>
<thead>
<tr>
<th>Ministries of Interior, Economy</th>
<th>1.10.1 Centralize the collection of fines through the banks or the post office. There is no reason to have hundred of municipal employees assigned to payment of fines. This process will require the process to be computerized, eliminating the paperwork that is overwhelming the municipalities.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.10.2 Increase considerably the cost of late payments.</td>
</tr>
<tr>
<td>Parliament</td>
<td>1.10.3 Introduce new legislation to permit outside collection firms to pursue individuals who are late in paying fines or are in default of their obligations.</td>
</tr>
<tr>
<td>Parliament, Ministries of Transportation, Economy</td>
<td>1.10.4 Create a central road safety fund to receive all fines throughout Greece. This fund will distribute the revenues to the appropriate ministries and local authorities for work related to road safety. The allocation model will have to be fair and favor those municipalities that show more diligence in enforcing the KOK and utilizing funds in the most cost-efficient manner.</td>
</tr>
</tbody>
</table>

1.11 Point System.

Greece introduced the point system some about 10 years ago. In the first two or three years of operation the process worked as intended. Some 2,500 drivers lost their driving license for a period of time, having accumulated enough points to exceed the limit of the point system. Since that time the process has lost most of its relevance with fewer than 200 people having lost their license in 2002. No one is taking the point system seriously at the present time, not the police, not the courts and certainly not the citizens.

The point system was designed to remove from the roads drivers who commit gross violations of the KOK (for example, driving 40km/hour over the speed limit) or drivers who are repeated offenders.
While no one has yet offered to take the blame for this shameful situation, more disturbing is that no one is championing the cause of reforming and re-energizing the point system. The government better do something fast because the point system has been proven all over the world to be one of the most effective ways to discourage drivers from committing gross violations or consistently violate the KOK.

**Actions required:**

| Ministries of Public Order, Justice | 1.11.1 Reforming and re-energizing the point system is a high priority. The government should just do it. A task force from the various ministries could quickly identify the weaknesses of the current system and recommend reforms to make the system work as intended. |

**1.12 Repeat Offenders.**

Repeat offenders in Greece theoretically risk of losing their license for a specific period of time (through the point system). Beyond losing the license and paying the applicable fines there are no other consequences for repeat offenders. The same is true for individuals who are found guilty of having caused an accident. These individuals just pay the applicable fines and it is over. In other European countries and the USA repeat offenders and drivers who have caused an accident are required to attend various road safety related courses to minimize the opportunity of another offense. Specifically, the following are expected from repeat offenders and those that have caused an accident:

- Lose their license for a period of time and pay a heavy fine. To reactivate their license they must take a new exam (theoretical).
- Must attend a defensive driving school at own cost.
- Must work in the community for a certain number of hours, preferably in rehabilitation centers for victims of traffic accidents.

Repeat offenders are a menace on the roads and the strong measures must be considered to reduce the possibility that they might cause serious accidents.

**Actions required:**

| Ministries of Public Order, Transportation, Justice | 1.12.1 Evaluate the entire package of measures applied by the most successful countries in Europe to deal with repeat offenders and with drivers who commit gross violations of the KOK. Determine the applicability of these measures in Greece. There are plenty of successful examples in other European countries, the USA and Australia. |
1.13 Stamp Out Corruption.

A recent report by an international organization monitoring corruption has reported that Greece has a high degree of corruption in most sectors of its economy. Press reports have covered this topic in detail and have publicized estimates on the lost revenue to the state due to the corruption. We will not enter into a political discussion as to whether the corruption is or is not widespread in Greece and what is causing it to exist. But we are interested in pressing the state to stamp out corruption in two specific areas that influence traffic accidents:

- The granting of driver licenses to individuals who do not have the required skills and
- The authorizations given by the KTEO to vehicles that are technically unsafe.

In our view it is possible to find ways to stamp out corruption in these two specific areas, provided there is the political will to do so. What is sad is that there is no plan addressing the causes and pointing out to the loopholes that create the conditions for this corruption. Not is there an action plan, of course, that proposes reforms and concrete measures. The lack of effort to do something in this area is unacceptable. As we have mentioned earlier, corruption has tremendous negative implications that go far beyond the two processes in question. It stains the whole system, rendering our relationship with each other and the state untrustworthy and meaningless.

Actions required:

<table>
<thead>
<tr>
<th>Ministry of Transportation</th>
<th>1.13.1 The Minister of Transportation who has responsibility for both the processes of granting driving licenses and of the KTEO should implement the appropriate reforms.</th>
</tr>
</thead>
</table>
2. Enforce the Wearing of Safety Belts and Motorcycle Helmets.

Wearing a safety belt or a helmet is the most effective way to reduce fatalities and serious injuries in case of an accident. Yet few Greek drivers and passengers wear safety belts and helmets consistently. To begin with, Greek society is ill informed in terms of the benefits of these two safety features. As a result there are a lot of misconceptions that prevail even amongst the educated people. For example, many people believe that:

- Safety belts are not required if a vehicle is equipped with air bags.
- Safety belts can trap a passenger and restrict him from escaping a vehicle on fire.
- Safety belts can harm a pregnant woman.
- Safety belts are useful only if we drive at high speeds (that explains why Greeks tend to wear safety belts more often outside the urban areas, or allow their children to stand up in the car when driving around town).
- A baby is safer in one’s arms than seated alone with a safety belt (the belt is too small for the child).
- Only the front occupants need to wear safety belts.
- All children seats are equally safe and it does not matter whether the seat is placed in the front seat or the back seat, or whether it is facing forward or backward.
- A helmet is not that useful at low speeds.
- All helmets offer the same protection (there is no list with approved helmets circulating in the market).

In addition to these misplaced arguments, Greeks consider belts and helmets not uncomfortable, especially during the hot summer months. They may also think that the risks of having an accident are so small as not to warrant the wearing of belts and helmets. Finally, they believe that wearing belts and helmets is a personal matter that should not involve the state or anybody else for that matter.

Convincing people to use safety belts is not an easy matter. Even in the USA not everyone is wearing safety belts, despite a long and costly campaign, “Buckle Up”, that provided irrefutable arguments in favor of wearing belts. To make progress in this area several inter-related processes will have to be addressed concurrently. The chart below lists the processes that will be discussed in this section:
2.1 Information Campaign.

Any effort to meaningfully increase the use of safety belts and helmets in Greece will have to start with an information campaign dispelling many of the myths against belts and helmets, providing accurate information on how belts and helmets save lives. Vehicle manufacturers have spent billions of dollars over the last 10 years to improve vehicle safety. Better structural design, improved seats and advanced seat belts and airbags have all dramatically reduced the chance of occupants receiving serious or fatal injuries in a crash. Oddly enough, the vehicle design improvements and the higher crashworthiness of the occupants’ compartment are not as effective if the occupant is not wearing his safety belt. Even the airbags are practically useless without the use of safety belts.

Accident and fatality studies and statistics convincingly demonstrate that belts and helmets can and do save lives. Merely mentioning these statistics to a reluctant, disbelieving and undisciplined population will not be enough. Several countries are using quite explicit commercials showing the consequences of an accident when the occupants were not wearing belts or helmets. The commercials aim to shock the viewer and generate emotive responses of anger and disgust. Greece will need a similar strong campaign to have a lasting impact.

There is an aspect associated with fatalities and serious injuries of occupants not wearing belts and helmets that is rarely mentioned, at least openly in Greece. Serious injuries have a negative impact on medical costs and insurance premiums. It is utterly unfair for people not to wear safety belts and helmets and to expect the state, the rest of us that is, to pick up the higher rehabilitation cost in case of an accident. Not wearing a safety belt can be a personal choice, with which the rest of us would have no objections, so long as the consequences of this choice are borne by the individual and not by society. Anyway, the state has made the use of safety belts and helmets mandatory so not wearing them is not a matter of choice but an act of defiance against the law.

Actions required:

| Ministries of Transportation, Public Health | 2.1.1 The Ministries of Transportation and Public Health should take the lead to develop a national information campaign in favor of using safety belts and helmets. This campaign should include TV commercials, magazine and newspaper inserts, as well as billboards. |
| Ministry of Education | 2.1.2 The Ministry of education should develop appropriate material for schools. Children should understand the risks that they and their parents are taking by not wearing safety belts. They should learn from young age to request to wear a safety belt. |
| Ministries of Transportation, Public Health | 2.1.3 The Ministries of Transportation and Health to address the specific needs of pregnant women and mothers with young babies. These groups are facing different technical requirements, which need to be communicated through doctors, nursery schools, etc. The Ministry of Health should publish a list of all approved child seats that meet certain safety requirements. |
Insurance Industry:
- Association of Greek Insurance Companies
- Association of Greek Insurance Agents

2.1.4 Insurance companies should inform their clients that they cannot expect full coverage in case they have an accident if it is determined that they were not wearing safety belts and helmets. This option exists in the insurance contracts but is never applied.

Ministry of Labor

2.1.5 Private companies and the public sector should inform their employees that they risk disciplinary action if they are caught driving company cars without wearing safety belts or helmets.

2.2 Enforcement

Wearing a safety belt and a motorcycle helmet is a requirement under the KOK. The KOK specifies the level of fines that are applicable in case of non-compliance with the law. The traffic police are responsible for catching the violators and for issuing citations.

Unfortunately, the police do not see this violation as a major problem. It is rare for the police to stop a vehicle just because its driver or occupants are not wearing a safety belt. The police may issue such a warrant if there are also other infractions, but would not issue a citation just for not wearing a safety belt. It is also disturbing to see young children seated in the front seat, or standing in the car, or even see babies being held in the arms of their parents instead of being anchored in an approved child seat. In all these instances the police are shameful spectators.

The police must first decide whether it wants to solve this problem and enforce the wearing of safety belts. Once it has made up its mind, it must then explore efficient ways of catching the offenders (cameras, roadblocks, vehicles and motorcycles with conventional plates, hand-held digital cameras, or whatever).

Recently, the police have made an effort to clamp down on motorcycle drivers and occupants for not wearing a helmet. Some positive results were seen as a result of the more intense policing. However, the earlier zeal observed in the streets of Athens, including possession of the motorcycle is fizzling away. One can see again hundreds of motorcycle drivers and occupants holding their helmets in their hand, openly challenging the law. And one has to wonder whether a traffic policeman knows how to distinguish an approved safety helmet from any other.

There are many instances of motorcycles passing provocatively in front of policemen who simply ignore them, probably because they have been given other duties. As mentioned earlier, the police must use whatever means it has in its disposal to crack down on this problem. A stricter enforcement of this provision of the KOK will benefit primarily the victims of traffic accidents. This has to be made clear to all drivers and occupants. Not wearing a safety belt or a helmet is not a personal choice. This is the law and it has been so enacted to protect the lives of citizens and contain medical and other related societal costs.
We should stress that wearing a safety belt or a helmet is an inexpensive and efficient measure to reduce fatalities and serious injuries in an accident. It does not require high investment in infrastructure or complicated administrative processes. All it takes is for every single citizen of this country to obey the law, not only because the state says he/she should do so, but also because the road users understand the implications of not wearing safety belts in case of an accident.

**Actions required:**

| The Traffic Police (Ministry of Public Order) | 2.2.1 | The police must raise the priority of enforcing the wearing of safety belts and helmets by drivers and occupants. |
|                                            | 2.2.2 | The police must explore more efficient ways of catching violators (cameras, roadblocks, vehicles and motorcycles with conventional plates, handheld digital cameras, etc.). Stricter policing will contribute to increasing the usage of safety belts and helmets and will contribute significantly in the reduction of fatalities and serious injuries. |

| Ministry of Transportation | 2.2.3 | The Transport Ministry to examine raising the fines to higher levels so that they can act as real deterrent (including immobilization of the vehicle for a period of time). |
|                            | 2.2.4 | Companies should introduce internal processes to verify that their employees are using safety belts and helmets when driving company vehicles (for example, they could not leave the premises unless they are buckled up). The Ministry of Transport should take the lead to develop information packs and processes to help companies introduce such measures. |

### 2.3 Child Safety Car Seats

Greece is way behind other European countries, the USA and Australia in terms of usage of child safety car seats. A minority of Greek parents correctly uses child seats while there is no broad base support for such usage or enforcement.

This should not be a surprise if we consider the following:

- The KOK is not explicit in terms of what kind of child safety car seat parents should use. Nor does the KOK specify the correct position of the child in the car in relationship to his age (front or rear seat, front-facing or rear-facing).
- There is no public campaign highlighting the benefits of using a child safety car seat. Nor is the government helping parents choose a car seat that meets safety requirements and is appropriate for the age and weight of the child.
- The police are not trained to detect the correct use of a child car safety seat.
- There is no explicit government strategy to increase the use of child car safety seats and reduce deaths and serious injuries to young children.
There are no accurate statistics related to deaths and serious injuries in Greece for children not properly secured in vehicles. In the USA, over 40% of children that have died in car crashes were not properly secured in the vehicle. This and other statistics from Europe are conclusive that a child has no chance of surviving a violent crash if it is not properly secured in an appropriate car safety seat.

The USA Department of Transportation (DOT) has announced a 5-year strategic plan to encourage parents to use children safety seats and to reduce deaths and injuries by 25%. The plan contains specific activities and responsibilities that individuals representing a variety of public and private sector organizations can undertake. These activities range from the conduct of public information and awareness programs about restraint use and booster seats, to the upgrading of child passenger safety law. They address the need for training, technical assistance, as well as the need for enforcement and the allocation of adequate resources.

The DOT has produced a chart showing the correct use of a child seat. It is reproduced here to make the point that the correct use of a child safety seat is a complicated matter requiring knowledge of the subject by parents and the police.

<table>
<thead>
<tr>
<th></th>
<th>INFANTS</th>
<th>TODDLER</th>
<th>YOUNG CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WEIGHT</strong></td>
<td>Birth to 1 year old</td>
<td>Over 1 year old</td>
<td>Ages 4-8, under 1.50 cm tall</td>
</tr>
<tr>
<td></td>
<td>At least 44 kg</td>
<td>Over 44 to 88 kg</td>
<td>Over 88 kg</td>
</tr>
<tr>
<td><strong>TYPE OF SEAT</strong></td>
<td>Infant only or rear-facing convertible</td>
<td>Convertible/Forward-facing</td>
<td>Belt positioning booster seat</td>
</tr>
<tr>
<td><strong>SEAT POSITION</strong></td>
<td>Rear-facing only</td>
<td>Forward-facing</td>
<td>Forward-facing</td>
</tr>
</tbody>
</table>

All children age 12 and under should ride in the back seat

**Actions Required:**

<table>
<thead>
<tr>
<th><strong>National Road Safety Commission</strong></th>
<th><strong>2.3.1</strong> The National Road Safety Commission should conduct a study that would compare the programs from European countries, the USA and Australia that deal with the issue of child car safety seats. The study should identify the best elements from each program to produce a strategy that is appropriate for Greece.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ministries of Education, Public Health, Transportation, Public Order</strong></td>
<td><strong>2.3.2</strong> In the meantime, the ministries of Education, Public Health, Transportation and Public Order should produce an information pamphlet for parents highlighting the benefits related to securing young children in cars. This pamphlet should be distributed through doctors and maternity wards, pharmacies and toy stores. The pamphlet should also highlight the risks of not securing young children, as well as the related death and injury statistics.</td>
</tr>
</tbody>
</table>
2.3.3 The police should be trained to detect the approved child safety car seats, the correct positioning and enforce the proper securing of young children in their safety seats. The police should take this matter seriously and increase its enforcement efforts.

2.4 Safety Helmets

As we have mentioned earlier many motorcycle riders do not wear helmets. But wearing a helmet is not enough to protect the motorcycle rider and occupant from serious head injuries. Only helmets that meet certain standards will protect the motorcycle rider and occupant. The technology in helmet design has improved considerably over the last years and various governments have produced specific safety standards. For example, the USA government through the Department of Transportation (DOT) describes in great detail the requirements for "DOT" certification of all helmets sold in the United States for use by motorcyclists. Helmets that do not meet the minimal DOT certification standards may not be sold as "motorcycle helmets." These standards have been communicated to all federal, state and local highway patrol enforcement agencies. The agencies have been instructed to issue citations if a motorcycle rider is not wearing a helmet on the list of approved helmets.

It is not clear whether the Greek authorities have promulgated their own standards for helmets or whether they have adopted EU regulations on this matter. What is certain is that no one is checking whether a helmet is an approved one or not. The various motorcycle associations in Greece do provide some assistance to their members on how and where to select safe gear, including helmets. But these associations usually represent owners of large displacement bikes. The large majority of motorcycle riders use smaller displacement mopeds of between 75cc to 125cc. Few of these riders invest in a safe helmet. Furthermore, it is highly doubtful that a policeman would be capable of distinguishing between a safe helmet and a “toy” helmet.

It is not surprise that a disproportionate high number of deaths and serious injuries involve motorcycles whose rider was not wearing a safety helmet. It is incomprehensible that with all the incriminating statistics on this matter and with all the technological improvements that have been made in the area of helmet design people still ride their motorcycle without any protection. It is important for the government to take appropriate measures to significantly increase the number of motorcycle and moped riders who use safety-approved helmets.

Actions Required:

| Ministries of Transportation, Interior, Commerce | 2.4.1 The Ministry of Transportation should adopt an internationally approved set of safety standards for helmet designs. The approved helmets should provide a minimum level of protection to head injuries in an accident. It should regularly publish the list of approved helmets, and with the assistance of the Ministries of Interior and Commerce prohibit the sale or importation of helmets that are not on the list. |
2.4.2 The Ministry of Transportation should develop information pamphlets that encourage motorcycle riders to wear safety-approved helmets. These pamphlets can be distributed through the stores that sell motorcycles, through the motorcycle associations, gas stations, etc.

2.4.3 The Traffic Police should train their officers to identify helmets that are on the approved safety list. Stiff citations should be issued to those wearing sub-standard helmets.

2.5 Insurance

The insurance companies should play a much more active role in encouraging drivers and passengers of cars and motorcycles to wear safety belts and helmets. This could be done through a strategy that combines the “carrot and the stick” approach. For example, insurance companies could offer lower rates to companies that develop internal processes to compel their employees to wear belts and helmets when driving company cars. On the other hand, insurance rates should be raised when car or motorcycle users are ticketed for not wearing safety belts and helmets or when they are involved in an accident and were not wearing belts and helmets. Furthermore, the insurance companies could apply the letter of the contract and refuse to fully cover the medical expenses of a client who was involved in an accident and was not wearing a safety belt and a helmet.

One may consider these measures extreme or severe. But wearing belts and helmets is by far the most cost efficient way of significantly reducing deaths and serious injuries. We should not ask the state to spend millions of taxpayers’ money in infrastructure and other operational areas to reduce traffic accidents, when there are far more economic ways to do the same, ways that we can influence with our behavior.

We suspect that some of the measures that we will recommend below will require new legislation that increases the pressure on citizens who refuse to obey the law, while at the same time protect their confidentiality rights. In today’s environment, if a car or motorcycle user is ticketed for not wearing a safety belt or a helmet, the police could not pass on this information to his insurance company for further action. We believe that insurance companies should have access of the complete driving record of their customers. This will necessitate the creation of a database that includes the driving history of all drivers (when did he acquire a driving license, tickets received, and accidents caused by the driver). No other information should be included in the list that may prejudice the confidentiality rights of citizens. The police, the courts and the insurance companies should be able to access this database.

**Actions Required:**

2.5.1 The Ministry of Transportation submit new legislation that allows the creation of a database that includes the driving record of all drivers. This record will include the date when the driver obtained his driving license, tickets received, and accidents caused by the driver. The police, the courts and the insurance companies should be able to access this database.
Insurance Industry:
- Association of Greek Insurance Companies
- Association of Greek Insurance Agents

2.5.2 The Insurance Industry to develop specific offers to encourage their clients to wear safety belts and helmets. At the same time it should announce to their customers that they could not expect full medical coverage if they are involved in an accident and were not wearing safety belts and helmets. Customers should also expect their insurance rates to go up if they have received a ticket for not wearing safety belts and helmets (as they had committed to do in their insurance contract).

2.6 Repeat Offenders

Individuals who are caught for the second or third time not wearing safety belts and helmets, just pay the corresponding fine, may receive additional points and nothing else. This is a difficult group to deal with because despite all the money and effort spent to sensitize them to the benefits and risks of wearing safety belts and helmets, they remain unconvinced, they disobey the law and remain vulnerable to serious injuries. For this hardcore group a different strategy may be needed. We list a host of measures that can apply additional pressure to convince them to comply with the law.

Actions Required:

Ministry of Transportation

2.6.1 The Ministry of Transportation to consider stiffer measures to deal with individuals who consistently refuse the wear safety belts and helmets (repeat offenders):
- Automatic loss of the driving license for a period of time.
- Mandatory attendance at a safety driving school.
- Mandatory participation in community programs, preferably working in rehabilitation institutions that deal with car injuries.
- Lock up the vehicle for a period of time.
3. Reduce the Frequency of Individuals Driving Under the Influence of Alcohol and Drugs.

In general, Greeks enjoy having a drink or two with their dinner, whether they are eating out or eating at home. Younger people tend to go out late at night to listen to music or go dancing. Having a drink in these locals is part of the experience. Unfortunately, most Greeks are not concerned whether the alcohol content in their blood exceeds 0.5 grams/liter of blood when getting behind the wheel. The general attitude is that “if I feel all right then it is OK to drive”. Statistics show that drivers who exceed the alcohol limit or who are on drugs cause many of the accidents taking place between 1:00 AM and 5:00 AM.

The Traffic Police has intensified its efforts as of late to clamp down on drink and drive offenders. The Police are now equipped with mobile breath-analyzers units and are frequently setting up controls in strategic locations during the night. In fact these controls are probably the single most important contributor to the reduction of traffic accidents the last two years. But these controls have not managed to change the culture and it is still the accepted norm that it is OK to drink and drive.

The European Union (EU) is very much concerned with the fact that over 9,000 people die every year in Europe who were under the influence of alcohol. Despite advice from governments that the safest option is not to drink and drive, many drivers still look to the legal limit for guidance about safe drinking and driving levels. There is wide agreement amongst medical and professional experts that a limit of 0.5 grams/litre is the highest level that should be permitted. In fact the maximum permitted blood alcohol level is 0.5 grams/litre in the majority of countries, with a slightly higher limit of 0.8 grams/litre in Italy, Ireland, Luxembourg and the United Kingdom, and a lower limit of 0.2 grams/litre in Sweden. At levels between 0.5 to 0.8 grams/litre, the risk of accident involvement for drivers in general is more than twice that of a sober driver. For some drivers the risk is more than ten times higher at 0.8 than at 0.5.

The European Commission has accepted the need for a common EU blood alcohol limit since 1988. The 1988 bid by the EC to introduce such a EU-wide limit collapsed when member states said Brussels officials were interfering with national affairs. The European Parliament has invited the Commission to introduce a new proposal. The European Commission would like to recommend that young drivers should be banned from drinking any alcohol if they intend to go behind the wheel of a car. It remains to be seen whether the member states will support even this proposal.

The Irish and UK authorities argue that equally important to setting the right limits is the enforcement of the law. They argue that many EU countries fail to enforce their legislation. “Limits without checks mean nothing,” said one source. The Commission accepts that the British, in particular, have managed to cut drink driving death numbers by 70% over the last 20 years without cutting the permitted alcohol level much higher.

The fines from one country to the other still vary, as do the alcohol limits. Most countries impose stiff penalties to offenders that exceed the considerably exceed the limit and to repeat offenders. Austria has developed a comprehensive set of punitive measures to deal with the problem. They are reproduced here as an example. The figures relate to a normal driving license for passenger cars. The fines for drivers with licenses for trucks and buses are higher.
### Example of fines and other measures from Austria and Greece:

<table>
<thead>
<tr>
<th>Alcohol Content</th>
<th>Austria</th>
<th>Greece</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 0.1 to 0.49 grams/litre</td>
<td>- No fine&lt;br&gt;- No loss of license&lt;br&gt;- No driving ban</td>
<td>- No fine&lt;br&gt;- No loss of license&lt;br&gt;- No driving ban</td>
</tr>
<tr>
<td>From 0.5 to 0.79 grams/litre</td>
<td>- Fine: €220 to €3,600&lt;br&gt;- 1st time: no loss of license or driving ban (warning)&lt;br&gt;- Within 1 year: 2nd time: min. 3 weeks 3rd time: min. 4 weeks</td>
<td>- Fine: €150</td>
</tr>
<tr>
<td>From 0.8 to 1.19 grams/litre</td>
<td>- Fine: €600 to €3,600&lt;br&gt;- Loss of license or driving ban: 4 weeks&lt;br&gt;- Confiscation of license on the spot</td>
<td>- Fine: €300&lt;br&gt;- Loss of license for 3 months</td>
</tr>
<tr>
<td>From 1.2 to 1.59 grams/litre</td>
<td>- Fine: €870 to €4,350&lt;br&gt;- Loss of license or driving ban: min. 3 months&lt;br&gt;- Confiscation of license on the spot*&lt;br&gt;- Additional training</td>
<td>- Fine of €600&lt;br&gt;- Prison term of 2 months,&lt;br&gt;- Loss of driving license for 6 months&lt;br&gt;- Second infraction within 2 years loss of license for 5 years</td>
</tr>
<tr>
<td>&gt; 1.6 grams/litre or in case of refusal to take the alcohol test</td>
<td>- Fine: €870 to €5,800&lt;br&gt;- Loss of license or driving ban: min. 4 months&lt;br&gt;- Confiscation of license on the spot&lt;br&gt;- Examination by the district medical officer&lt;br&gt;- Traffic psychology test&lt;br&gt;- Additional training</td>
<td>- Same as above</td>
</tr>
</tbody>
</table>

A quick observation of the table above suggests that the fines in Greece are too low to dissuade drivers from drinking and driving (compared to Austria). But an important fact is that no one ever goes to jail for having consumed alcohol, and no one has ever met someone who has lost his license for two months. Whether this is because the Police and courts show “compassion” or whether the punitive measures are erased, we cannot tell.

In most countries drinking alcohol seems to receive more attention that driving under the influence of drugs. Yet, most studies suggest that drugs have the same impact on driving ability as alcohol. The KOK specifies equally stiff penalties if a driver is caught driving drugged but the limits and the methods of checking drivers are not as explicit as with alcohol. The KOK does specify that test should be done in the event of an accident, including the diseased. The laws are on paper to deal with the problem; it is the application that lags behind.
It has been reported that the “godfathers of the night” have threatened the police and even executives of insurance companies that are advocating more stringent controls of alcohol consumption. Apparently, these people were concerned with the fall of revenues that was felt following the increase in police controls. If this allegation is true, then the police must confront them, head on. Greek society cannot allow people losing their lives, especially young people, because of the commercial interests of a few bar owners.

**Actions Required:**

<table>
<thead>
<tr>
<th>Action Category</th>
<th>Action Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Police (Ministry of Public Order)</td>
<td>3.1 The Traffic Police must intensify the breath-analyzer tests so that it is almost a certainty that one will be tested as he or she returns home, late at night from restaurants and entertainment spots. The police should acquire more breath-analyzer equipment and commission more police cars for the tests.</td>
</tr>
<tr>
<td>Traffic Police (Ministry of Public Order)</td>
<td>3.2 The Traffic Police should make sure that their officers are well trained to conduct breath-analyzer tests and that they apply the law to the letter. Any “erasing” of fines or indications of “compassion” by police officers or members of the court, should not be permitted and should be dealt with in a severe manner.</td>
</tr>
<tr>
<td>ELPA and the Insurance Industry</td>
<td>3.3 ELPA, the insurance companies and other interested non-governmental organizations should develop a campaign against drinking and driving. They should seek funds from Greek corporations, the EU and the Greek government. The Greek public needs more information on the risks of driving under the influence of alcohol and drugs.</td>
</tr>
</tbody>
</table>
| Ministry of Transportation | 3.4 The Ministry of Transportation working with non-governmental organizations should build momentum for Greek society to accept innovative approaches to reducing drinking and driving:  
  - “Designated Driver” (one person in the party that will not drink)  
  - “Volunteer Driver” (usually university students) who for a fee will drive the party back home in their own car. The volunteer will wait at the designated place and time.  
  - “Take a Taxi, Leave the Car at Home”. Taxis are quite inexpensive in Greece and respond rather quickly through the radio taxi service. |
| Ministry of Transportation | 3.5 The Ministry of Transportation to extend the hours of operation of the buses and Metro to at least 3:00 AM on weekdays and 4:00 AM on weekends. It is incomprehensible for the buses and the Metro to stop operations at midnight in a country where people go out to dinner at 10:00 PM. The fees could be higher at night, something everyone would accept. |
| **Restaurant and Bar Owners** | 3.6 Larger restaurants and bars could install breath-analyzer tests in their premises to allow their patrons to test themselves before getting behind the wheel of a vehicle. This equipment is not expensive and might turn out to be a “marketing coup” for those that espouse this socially responsible measure. |

4. Reduce the Violations of Red Lights and Stop Signs.

Drivers who ignore the red lights or stop signs at intersections cause many of the urban accidents in Greece. The disrespect of traffic lights and stop signs is particularly evident at night when drivers know that the chances of being caught by (the non-existing) police patrols are minimal. While there can be no excuse for someone driving through a red light, there is a problem related to the signalization of stop signs that contributes to their irrelevance. Most stop signs in Greece are placed in the wrong location, for example too far from the intersection. Furthermore, there is no solid line on the pavement to indicate the exact spot where a driver must come to a complete stop. But worst of all there is no awareness by the driving public that going through a red light or stop sign is a grave violation of the KOK that can cause serious accidents.

Below are the concrete measures that need to be taken urgently to significantly reduce the violations of red lights and stop signs:

**Actions Required:**

<table>
<thead>
<tr>
<th>Ministry of Transportation and ELPA</th>
<th>5.1 Conduct a public campaign sensitizing citizens to the gravity of violating red lights and stop signs and disseminate to the public the related accident statistics. Re-educate the driving public to understand that a car must come to a complete stop at a stop sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Transportation</td>
<td>5.3 Raise the fines for these two infractions to reflect the gravity of the violation.</td>
</tr>
<tr>
<td>ΥΠΕΧΩ∆Ε and the Traffic Police (Ministry of Public Order)</td>
<td>4.3 Install cameras at intersections to photograph the license plates of violators who go through yellow lights (late in the cycle), red lights and stop signs.</td>
</tr>
<tr>
<td>ΥΠΕΧΩ∆Ε</td>
<td>4.4 Install sensors at intersections to detect incoming traffic and facilitate the switching of the lights in line with demand. This will reduce the waiting time when no other car is present at the intersection.</td>
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<td></td>
<td>4.5 Review the positioning of all stop signs throughout Greece. Assess whether a stop sign is appropriate, as opposed to a yield sign, and then determine the correct position of the sign at the intersection. Solid white lines should be painted on the pavement at the exact position where cars need to stop. A car that has stopped at this position must have good visibility to judge whether it is safe to cross the intersection.</td>
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<tr>
<td></td>
<td>4.6 Replace all stop signs that have faded or do not comply with the specifications in terms of size, color, etc.</td>
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</tbody>
</table>
5. Reduce the Incidents of Illegal Overtaking.

The term “illegal overtaking” includes a number of maneuvers all of them highly dangerous for the driver and for other innocent people:

- Passing on a double line,
- Overtaking front the right side of the vehicle in front,
- Weaving through traffic by motorcycles.

The statistics in Greece do not specify with accuracy the percent of accidents that are caused by illegal overtaking. This is because it is sometimes difficult to establish whether an illegal overtaking has indeed taken place and because there are usually other contributing factors that are more easily detected (such as speeding or a slippery surface). But there is no doubt that illegal overtaking is causing a large number of accidents in Greece, including head-on collisions. What is sad is that illegal overtaking does not only impact the culprit, but in most of times causes serious injury or loss of life to unsuspecting victims that happen to be on the way.

The practice of overtaking vehicles in prohibited areas where there is a double line is routine in Greece, particularly in the secondary road network. All of us have observed insolent drivers crossing a double line even in tight bends of the road with hardly any visibility. This criminal and irresponsible act goes unpunished day after day. If one complaints to another driver for his dangerous driving all he will get back is a bewilder look questioning the sanity of the victim. In other instances, the response might be violent, indicating the lack of respect for the life of others.

Motorcycles weaving through traffic cause many of the collisions between motorcycles and pedestrians. This practice of weaving through traffic is rarely seen in any other part of the world. The main culprit here is the police and the state in general that have tolerated this unacceptable behavior for so long. The KOK clearly states that motorcycles have to obey the same rules and regulations as any other motorized vehicle. This means they have to drive on the right side of the road, they have to pass only on the left and they have to respect the markings on the road, including double lines.

The causes of illegal overtaking are complex and they include:

- Weaknesses in infrastructure (long stretches of road without the ability to pass legally, double lines that have faded and are not visible even during broad daylight, the absence of signs indicating a no-passing area or signs to allow passing again, the absence of signs calling for heightened attention due to special climactic or environmental conditions, etc.).
- Absence of policing, particularly at night.
- The tolerance that the police and the state have shown over the years towards illegal overtaking. Not only is the police ignoring these violations, but also they sometimes commit the very same infraction they are supposed to uphold.
- The general ignorance of Greek drivers that overtaking from the right is illegal.
- The resistance of motorcycles to obey the KOK and refrain from weaving through traffic. Some motorcycle organizations have even argued that if
the police truly prohibited weaving through traffic it would render motorcycles obsolete.
- The undisciplined and chaotic culture that prevails on Greek roads today as it relates to obeying the law and respecting the lives of others.

Illegal overtaking is a most serious infraction and should be dealt with vigor and consistency. We recommend the following measures.

**Actions Required:**

<table>
<thead>
<tr>
<th>Ministry of Transportation and ELPA</th>
<th>5.1 Conduct a public campaign sensitizing drivers to the need to obey the provisions in the KOK related to illegal overtaking. Disseminate to the public the related accident statistics.</th>
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<tbody>
<tr>
<td></td>
<td>5.2 Enter into a dialogue with responsible motorcycle associations to arrive at a transition plan for eliminating completely weaving through traffic by motorcycles.</td>
</tr>
<tr>
<td>Traffic Police (Ministry of Public Order)</td>
<td>5.3 Increase the policing of illegal overtaking with unmarked police cars.</td>
</tr>
<tr>
<td>Ministry of Transportation</td>
<td>5.4 Raise the fines for illegal overtaking to reflect the gravity of the violation.</td>
</tr>
<tr>
<td>ΥΠΕΧΩ∆Ε</td>
<td>5.5 Establish as a standard that there must be passing lanes on all secondary roads every x kilometers. Progressively implement this policy throughout Greece. This will clearly take time and money, but it is an indispensable measure that can no longer wait consideration.</td>
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</tbody>
</table>
Epilogue

We should mention that while the implementation plan will focus on the measures that need to be implemented to improve road safety, such as infrastructure, policing or driver behavior, we should not ignore that higher automobile ownership in Greece is also affecting the overall level of road accidents. The more cars we have on the roads of Greece, the more accidents are likely to occur. And car ownership is expected to rise further, primarily because of further increases in disposable income and the progressive reduction of car taxes and retail prices (pressure by the EU for convergence of pre-tax prices throughout Europe).

Buying an automobile fulfills aspiration needs and provides flexibility and mobility unrivaled by public transportation. At the same time, the automobile creates congestion, pollution and contributes to numerous road accidents. Finding ways to limit the use of automobiles for certain trips, such as urban trips or inter-city trips serviced by fast rail or modern buses, is a priority that while not explicitly addressed in this report, must preoccupy the government and Greek society. A more balanced development of public transport and the automobile is necessary and can also contribute in further reducing accidents.