



ShLOW

Show me How Slow

Final Project Report



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Acknowledgments

Completing my studies in mechanical engineering at the University of Patras , I had the challenge to participate in ShLOW, an initiative of ETSC supported by the European Commission. In Greece ShLOW was supported by RSI Panos Mylonas.

This participation in ShLOW, gave me the opportunity to deal with speeding issues and to become acquainted with speeding management. I have to admit that it was an invaluable experience for me that opened my horizons.

I would like to send special thanks to Mr. Gabriel Simcic and his team as well as the President of the Greek Road Safety Institute , Miss Vasiliki Danelli- Mylona for their support and invaluable help throughout ShLOW project.

I would like to highlight that even if ShLOW camp is completed for us ,here in Greece, its only the beginning. Thanks to the initiatives of ETSC a new chapter has opened. We have retrieve innovative ideas and experience. We will seek further opportunities to disseminate the results and to educate each and every one in this country in order to wipe out fatalities caused by speeding and to provide our support to our environment.

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1. Speeding and Education

Speeding in Greece is the root cause of road accidents. Drivers and citizens in general do not realize the importance of abiding by the speed limits.

In my opinion education plays a very important role if we want to limit this type of behavior. As a result I would like to focus on this domain.

I find that education is lacking in Greece and that there should be a more concentrated effort to approach and sensitize not only drivers but each and every citizen as we are all users of the roads.

So, the main objective of the project was to:

- ✓ To approach and educate drivers

2. Objectives

Overall Objectives:

- ✓ To educate and sensitize drivers
- ✓ To convince drivers to reduce speed

Specific Objectives:

- ✓ To publish an article on speeding
- ✓ To cooperate with companies providing road safety courses and educate them on speeding
- ✓ To approach local authorities and Traffic Police and convince them to take action on this subject.



3. Target Group

In my opinion excessive speeding is a major problem and everyone should be addressed. Especially here in Greece the need to change the mentalities of the drivers is really high. As a target group I could identify the whole population of Greece. But more specifically I divided this target group in two smaller ones.

- ✓ Heavy vehicle Drivers
- ✓ Light vehicle drivers and Teachers(the majority of the teachers are light vehicle drivers)

Why?

Heavy Vehicle Drivers because :

- ✓ They are frequent road users
- ✓ They are driving big vehicles
- ✓ There have not been many attempts to educate them
- ✓ They exceed the speed limits due to their tight schedule
- ✓ **They are facing rollover and jackknife problems due to overspeeding.** That affects the environment and also all the other road users

Light Vehicle Drivers and Teachers because:

- ✓ They are frequent road users
- ✓ People who use frequently the same roads tend to exceed the speed limits
- ✓ If we convince teachers to change their mentality on speeding that will also influence the new generation , the “future road users”

4. Activities Carried Out During Shlow.

26/06/2009

I approached Quality & Safety L.t.d (A company which provides road safety seminars www.qsafety.gr) and I explained to them Shlow .

So we came to an agreement. I would create a presentation and they would run this presentation to all the drivers that they trained.

27/06/2009-1/07/2009

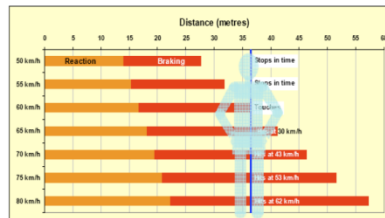
I prepared the presentation. I included elements from the week in Brussels on speeding. Basically the structure of the presentation is:

- ✓ What is Shlow and its main objective.
- ✓ Why speeding is a problem.
- ✓ What causes speeding and consequences of speeding?
- ✓ Speeding and Enviroment .
- ✓ Speeding and People. (for example, why societies have set limits to all their roads , how we should respect the other road users etc)

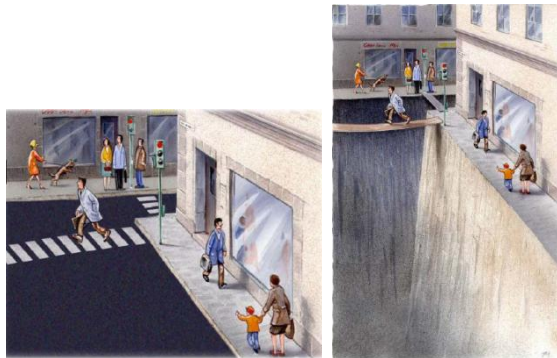


- ✓ How people perceive danger and how they react to it (reaction time)
- ✓ How does speeding affect road accidents (its relation with braking distances and examples like if you drive at a constant speed of 60 km/h and you see a pedestrian 35 metres in front of you will you be able to stop?)

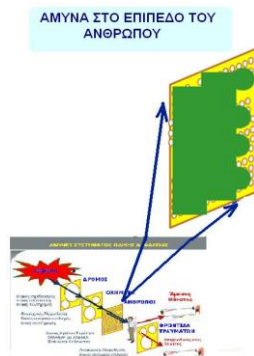
Figure 2.1. Stopping distance at different speeds (including reaction time of around 1 second)



- ✓ How speeding affects the driver (for example how it affects his range of vision.)
- ✓ Energy and road accidents ($E = m \cdot v$, $m = \text{mass}$ & $v = \text{velocity}$) (I included the following pictures illustrating how pedestrians do not perceive the energy that vehicles have while they are moving).



- ✓ How we can protect ourselves?



2/07/2009

I ran this presentation to the trainers of the company, educating them on speeding and its consequences.

8/07/2009

Meeting with Q&S Ltd in order to arrange an appointment with Mr. Lykas, the Transportation Manager of BP Hellas.

9/07/2009

I prepared an evaluation form of 11 questions that the drivers who attended a course on Shlow would complete. (I am attaching it to you by e-mail but also I present to you the results on the 5th part of my report.)

From 15/07 until now 18/01/2010

This presentation is running through Q&S Ltd educating more than 100 drivers of heavy and light vehicles and **it will continue running after the end of Shlow** as they have included it into their defensive driving course.

Some of these courses were:

- ✓ 13/09/2009:Extracting Company Of Thessalia
- ✓ 29/10/09-11/11/09 : BP Hellas
- ✓ 2/11/09:Lafarge Hellas
- ✓ 24/11/09-5/12/2009:Linde
- ✓ 7/01/2010:R.A.P.I Rhodes SA

More than 100 drivers of heavy and light vehicles were trained. I explain this part on the 5th part of my report more thoroughly)

27/07/2009

Meeting with Mr. Lykas in order to present to him Shlow and discuss the option of taking some data regarding speed from the GPS that the tank-trucks of BP have.

BP has a database storing all the data from the GPS system that the tank-trucks have on them. The GPS system from each vehicle sends information to a main system regarding its speed, its position, time but also the driver. So I could take some data and process it in order to make a statistic analysis on speeding.

I reached an agreement with Mr. Lykas. The plan was to gather the speed data from 9 specific tank-trucks from the 17/06 up to the 2/07, process it in order to obtain a specific knowledge on the “speeding profile” of the drivers, make the presentation on Shlow to those specific drivers and then take again some data to see whether the presentation has helped them realize how dangerous speeding is and if they have reduced their speed. (You can find more details on the 5th part of my report.)

28/07/2009-29/07/2009

I collaborated with Mr. Dertouzos, the road safety coordinator of BP, in order to gather the data for those 9 specific tank-trucks from the 17th of June up to the second of July 2009.

{ I have to mention here that the process of the data has just finished and that the presentation on Shlow to those drivers will be done during February 2010 and the rest of the data will be gathered at the same days from 17/06/2010 up to 2/07/2010. I will elaborate on this subject at the fifth part of my report. }

12/09/2009

I wrote an article on speeding which was published on the site of Q&S ltd <http://www.qsafety.gr/j15/images/stories/speed.pdf> and which was handed out to all the drivers that were trained.

15/09/2009

Meeting with Q&S ltd for the campaign in Halkida.

20/09/2009-23/09/2009

In the city of Halkida, Q&S ltd with the cooperation of The Municipality of Halkida and Lafarge Hellas organized a road safety campaign.

During this campaign there were “safety time-outs” educating teachers of Halkida but also citizens of Halkida on Speeding (with my presentation on Shlow) More than 100 teachers and more than 60 citizens of Halkida were trained.

http://www.qsafety.gr/j15/images/stories/qsafety/qs_1.pdf

2/10/2009

Meeting with Q&S ltd in order to plan the presentation on Shlow for an exhibition that the Traffic Police of Halkida was preparing.

25/10/2009

Meeting with the Chief of the Traffic Police of Halkida, Mr. Spanos, in order to discuss some details before the presentation.

27/10/2009-1/11/2009

The Exhibition of the Traffic Police of Halkida.

More than 150 people were educated on Speeding.

The presentation was attended by representatives of the local authorities, the traffic police, the professional drivers of the area and their federations and unions. The presentation was also attended by the president of RSI Panos Mylonas, Miss Vasiliki Danelli-Mylona.



In these pictures you can see Mr. Bakas, the General Director of Q&S Ltd, performing the presentation on Shlow, and on the second picture Miss Mylona the president of RSI Panos Mylonas, Mr. Bakas and Mr. Sfetsas a Traffic Police Officer.

You can find more photos at the site of Q&S Ltd, in this address :

http://www.qsafety.gr/j15/index.php?option=com_content&view=article&id=75&Itemid=85&lang=el

21/12/2009

Meeting with Q&S Ltd in order to talk about more perspectives on Shlow

8/01 /2010

Meeting with Q&S Ltd. They wanted to talk about Shlow and if I would present it to the instructors and assessors of IAM fleet UK (Institute of Advanced Motorists) that they would arrive in Greece on the 10th of January 2010.

12/01/2010

The instructors and assessors of IAM fleet UK, Mr. Reg Henderson and Mr. Steve Rowson (Institute of Advanced Motorists) attended a training of drivers on Shlow. They liked it and they took elements of my presentation to integrate to their own.

5. Results and Impact

In general **more than 420 people were educated on Shlow** (including all the employees of Q&S Ltd, the Transportation manager of BP Mr. Lykas and his associates , the Chief of Traffic Police and the Instructors and Assessors of IAM fleet UK) .

More specifically :

1. 20/09/2009-23/09/2009

In the city of Halkida , during the “safety time-outs” more than 160 drivers (100 teachers and 60 citizens)were educated on Shlow.

2. 27/10/2009-1/11/2009

During the Exhibition of the Traffic Police of Halkida more than 150 people were educated on Shlow.

3. From 15/07 until now 18/01/2010

More than 100 drivers of heavy and light vehicles were trained through Q&S L.t.d. (and the trainings will continue running through the whole year 2010).

The drivers were from the following companies:

- ✓ BP 
- ✓ Lafarge Hellas 
- ✓ Linde 

- ✓ Extraction Company of Thessalia
- ✓ R.A.P.I Rhodes S.A
- ✓ Athenian Sea Carriers
- ✓ Minerva Marine
- ✓ Easy Street
- ✓ Stealth Maritime
- ✓ Mediterreanean
- ✓ Fire Department

As I have mentioned above I have created an evaluation form of 11 questions that the drivers who attended a course on Shlow would complete. This was done only with the last category (3.).

The Evaluation form (I have attached it to the mail) had the following questions:

- 1) How much do you believe that the seminar helped you become sensitized on speeding?
- 2) How much do you believe that the seminar helped you perform your job with more safety for you and for the other road users?
- 3) In what degree do you believe that the knowledge that you obtained here will help you perform your job in a better way?
- 4) Were you able to understand how dangerous speeding is?
- 5) Will you apply what you learned on speeding to your driving?
- 6) How do you evaluate the material that was presented to you?
- 7) How do you evaluate the flow of the seminar and of the material?
- 8) How do you judge Shlow?
- 9) Do you think that there should be more drivers trained on the matter of speeding?
- 10) Will you pass on the knowledge that you obtained to your friends and relatives?
- 11) You can write recommendations and suggestions for domains of the presentation that need to be improved.

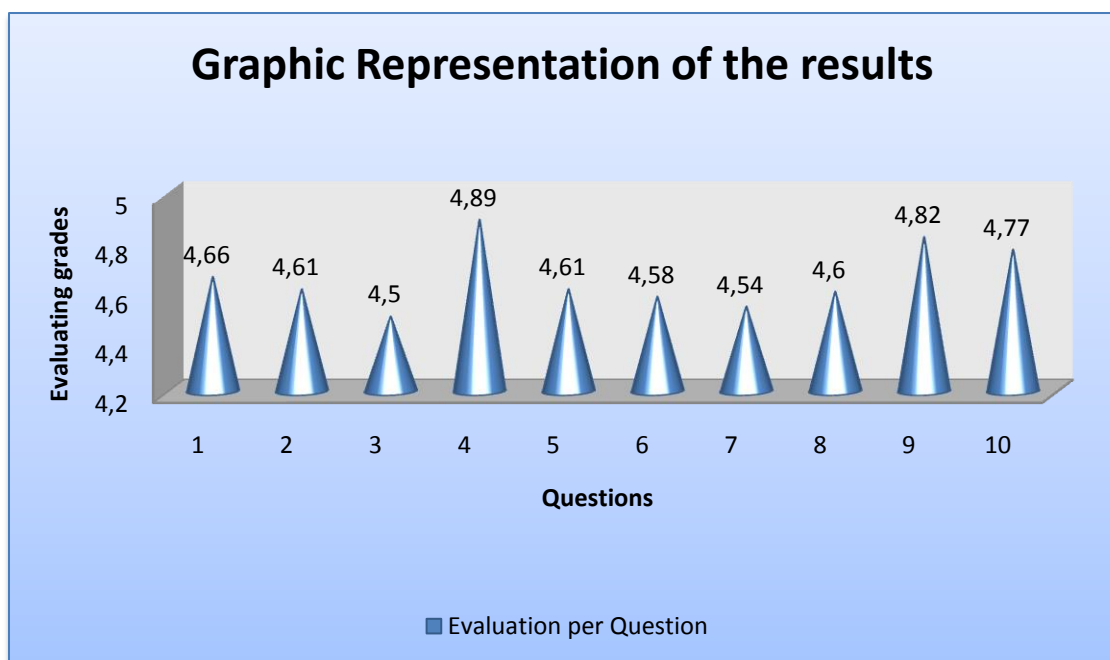
So the drivers after the presentation on Shlow were called to complete this form by giving to each question a grade from 1 to 5.

- 1: preposterous/unacceptable/No
- 2: Really bad/little
- 3: neither good nor bad/maybe
- 4: good/sufficient
- 5: Very good/Yes

Except for the 11th question in which they were able to write down their suggestions.

And the results are :

Questions	Evaluating Grades
1	4.66
2	4.61
3	4.5
4	4.89
5	4.61
6	4.58
7	4.54
8	4.6
9	4.82
10	4.77



As you can see the results were above good, approaching very good, as the lowest point is 4.5 in question 3 and the highest point is 4.89 in question 4 which was a critical question. Almost every driver understood how dangerous speeding is.

In question 9 which has the second highest point 4.82 indicates the need of the drivers to be educated on speeding. Those who attended the course suggest that more drivers should be educated on this subject not to mention that in question 10 (4.77) they say that they will try to pass on the knowledge that they have obtained from the course to their friends and family.

What is remarkable is that in question 11 the drivers only wrote about the importance of these seminars. I quote “You should perform this seminar to schools and through television”, “You should perform this seminar in different areas of Greece like Patrai”.

To sum up, the evaluation from the drivers couldn't have gone any better. Everyone was pleased. They seem to understand the message that I tried to pass on with my presentation and they were receptive.

From this Evaluation Form I was able to draw the **average driver** that was trained as they were also asked to write down their names and ages.

Average Driver

Occupation: Truck Driver

Age: 39

Sex: Male

This evaluation form was one type of evaluation of the project from the part of the drivers. The other type of evaluation is more objective but will not be completed before the 15th of July 2010. This type of evaluation is as I have mentioned above with the cooperation of BP.

Each tank-truck of BP is equipped with a GPS system. This System records all the data of the vehicle regarding speed, position, time and distance travelled. So, the plan was to:

- ✓ gather the speed data from 9 specific tank-trucks of BP from the 17/06 up to the 2/07 (driven by 21 drivers)
- ✓ process them in order to obtain a specific knowledge on the “speeding profile” of each driver
- ✓ make the presentation on Shlow to those specific drivers
- ✓ And then gather again some data to see whether the presentation has helped them realize how dangerous speeding is and if they have reduced their speed.

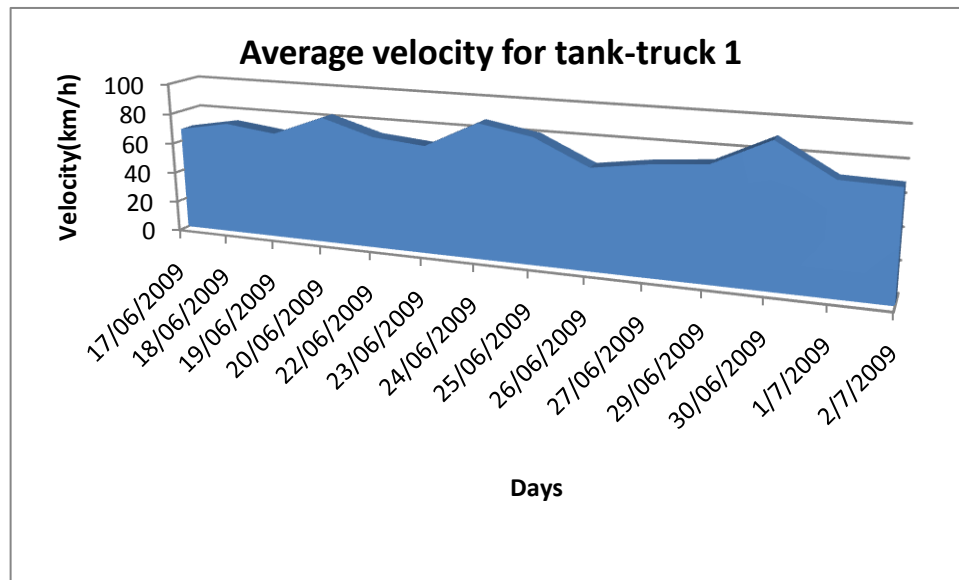
But until now 18/01/2010 only the two first steps of this evaluation process have been completed.

During February 2010 in cooperation with Q&S Ltd we are planning the presentations and the speed data will be gathered from the 17th of June 2010 up until the 2nd of July 2010. The result that I am expecting is a reduction of their speed.

Some of the data that I have processed are following. For example,

Tank-truck 1:

From the 17th of June to the 2nd of July, tank-truck 1 had an average velocity of 68km/h and a maximum velocity of 97km/h.



From the diagram above we can observe that for 14 days the average speed never dropped below 63 km/h. If we keep in mind that this tank-truck was moving only inside the town of Athens this velocity is really high coming from a heavy vehicle.

In that way and even more thoroughly I have processed these data.

Moreover, I should mention that the article that I wrote was published on the site of Q&S ltd and was actually handed out to all the drivers who attended the seminars.

6. Ending Shlow

Ending this project I feel really confident about it because even if the project's deadline expires, here in Greece it will continue running. Even more people will be educated on speeding and I am optimistic that this effort will manage to change the mentality of the drivers on speeding. Greece is in need of such movements as the majority of fatalities are caused by high and inappropriate speeding.

Consider me at your disposal for any further information.

Baka Chrysi.

