

FINAL REPORT

Bartošova čtvrť – Zlín

(30 km per hour zone)



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ČVUT v Praze
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1 Issue

My project is conducted to 30 km per hour zones. There is an issue of traffic in 30 km per hour zones and the issue of speed in these 30 kph zones in the Czech Republic. Authorities in the Czech Republic have set up many new 30 kph zones in town's neighbourhoods without any infrastructure changes. There are only the traffic signs which advertise beginnings and ends of the zones. The 30kph zones are quite new in the Czech Republic. But there are no campaigns which can introduce these zones to public. Drivers don't know the reason, they don't know why the 30 kph speed is better and more important than the 50 kph speed. One part of my project is aimed to roads near schools where the 30 kph limitation also is. I focused on one particular location – black spot, Bartosova ctvrt neighbourhood in town Zlin which is in the south-east part of the Czech Republic. For further information and photos about Bartosova ctvrt neighbourhood read the Progress Report I, please.

2. Objectives and 3.Target groups

I focused on two basic implements

I. infrastructure

II. education

Every way will be described separately now:

I. Infrastructure

There is the speed issue and issue of the respect of right hand rule on crossroads in Bartosova ctvrt. I wanted to convince the local authority – Department of Transport of municipal council in Zlin that this issues should be solved. I aimed to entry a gate to the zone and to section near the basic school.

My goals are:

New, effective and lowcost entry gate to the zone on Drevnicka rd.

Infrastructure calm near the basic school and near the public transport stop

Additional goal: Keeping of right hand rule on all crossroads in the neighbourhood



Figure 1 – Entrance to the area – Drevnicka rd.



Figure 2 – Children cross the road to bus stop, Drevnicka



Figure 3 – Right hand rule on Drevnicka rd. = time bomb



Figure 4 – Right hand rule – confused, basic school

II. Education

I wanted to introduce generally the 30 kph zones to public. This means the campaign which is in form. I chose the DVD clip, because it is a cheap solution, which I can achieve for this project. The contents of this DVD campaign should give information about the 30 kph zones and the differences between 30 km/h speed and 50 km/h speed.

This campaign is addressed to:

1) Parents of pupils from local basic school.

It should mainly concern the parents which live in Bartosova ctvrt residential area. It should be their interest in safety of their own children. This appeal will be realized by means of co-operation with the school management. The parents will get the DVD compact via their children and school. The children are achievable group. They can become an effective multiplier of important information to the parents (grandparents, aunts, neighbours). Child's word aimed to the own protection has great weight. ("Mummy, Daddy, your driving by 50 kph increases the danger. We may not come back from school one day. The 30 kph would protect us").

2) Pupils of driving schools in town Zlin

The DVD compact is for driving schools' teachers. It should be a good didactic tool. There are 15-20 driving schools in Zlin.

3) Public visitor and pupils at schools all around the Czech Republic

This idea came very late. The short spot of campaign can be showed by ŠIK CZ s.r.o. company. This company provides a constant supply of quality and desired information through large screens displays which are installed in selected grade schools, high schools and universities around the Czech Republic. For the further information see <http://www.sikcz.cz/en/>. But this goal will not definitely be finished by 15th January 2010. For details and results of the idea see in the end of this report.

4. Activities carried out

I. Infrastructure

1. 9th of September 2009 - Measurement of speed on Drevnicka rd. close to basic school.

I realized the measurement of keeping the maximum speed on Drevnicka rd. on the section close to basic school on 9th September 2009. It was measured speed of 190 accidental cars. The device was two retroreflective sensors fixed 2 m from each other (see photos below). The sensors were borrowed from Faculty of Transportation Sciences at Czech Technical University in Prague, from Institute of Forensic Experts in Transportation.



Figure 3 – Retroreflective sensor on tripod



Figure 4 – Device connected to laptop

After statistical processing of measured data the results are: The average speed of all measured vehicles was 43.5 km per hour, which is 13.5 km per hour above the speed limit. 85% percentil of speed is $V_{85} = 51$ km per hour. There were only 10 drivers who didn't break the law and drove 30 km per hour or less. It is only 5.2%!!! The maximum speed which was measured was 71,3 km per hour.

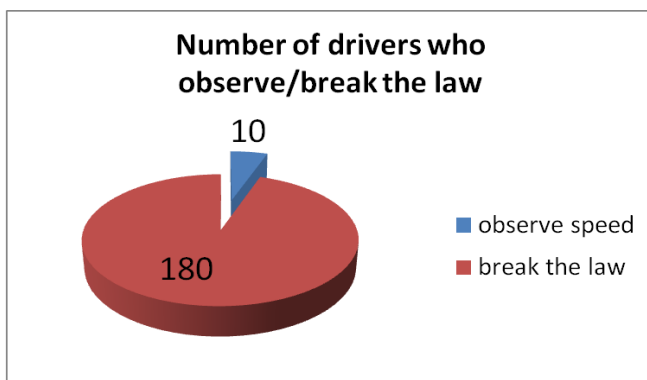


Figure 5 – Graph of keeping the maximum speed

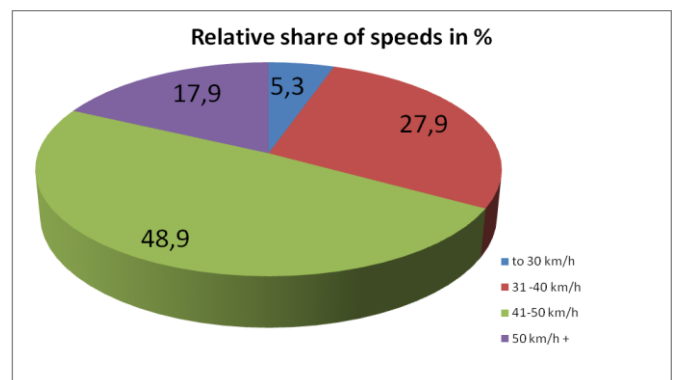


Figure 6 – Graph is selecting the speeds

2. 22nd of September 2009 - Contacted DSZO s.r.o. company (Public transport company) via e-mail for the purpose of getting technical information about fleet

My idea was a construction of speed cushions on Drevnicka rd. near the basic school and bus stop. For this I wanted to know the size of track of fleet and size of tyres.

Contacted person: Mrs. Ludmila Abrahamova
technical manager
e-mail: abrahamova@dszo.cz
websites: <http://www.dszo.cz>

3. 30th of September 2009 - Contacted JDTMZK company (county authority) for purpose of getting GIS

I asked for GIS data of whole area, exactly a technical map with underground services. I recieved the data in DWG format (AutoCAD) of location next week. I was prepared for design of my proposal.

Contacted person: Mr. Ivan Kusák
e-mail: ivan.kusak@geovap.cz
websites: <http://www.jdtm-zk.cz/>

4. 14th of October - Colected accidents statistical GIS data

The result are: no tragic accident with vulnerable road users in 2007 and 2008

Contact: Ministry of Transport of the Czech Republic and Centrum dopravního výzkumu v.v.i.
websites: www.jdvm.cz

5. 23rd of October 2009 - 1st meeting in Department of Transport in municipal government in Zlin.

Introducing of ShLOW! and my project. I gave the [brochure about the issue](#) of Bartosova cvrt residential area to hands of Mr Pavel Dohnal. I suggested the calm realization and arranged the next meeting with the particular suggestion. I got a contact to Ms. Andrea Fuskova, a specialist in traffic signs.

Contacted person: Mr. Pavel Dohnal
principal od Department of Transport in municipal government in Zlin
e-mail: paveldohnal@muzlin.cz
websites: <http://www.zlin.eu/en>

I consulted the issue of the location with Mr. Pavel Skladany, Transport Research Centre. He helped me with suggestions of calming.

6. 27th of October 2009 – Contacted TURA driving school via email to discuss the issue of the respect of the right hand rule in the particular location.

We were discussing current situation and the issue of speed and the right hand rule in the area in several emails. There was a mention of attitude of Department of Transport in municipal government in Zlín to external proposals and warnings to issues from driving schools in Zlín. This note was quite negative.

7. November 2009 - Proposal of calming measures

I designed proposals of 2 choices of entry gate to the area and calming near the school. There were designed proposals of the solution to right hand rule issue – STOP lines on crossroads. The design was made in the applications AutoCAD and Adobe Photoshop. For current situation and better photos see the pictures [in annex of Progress Report II.](#)



Figure 7 – Photoshop proposals of solution

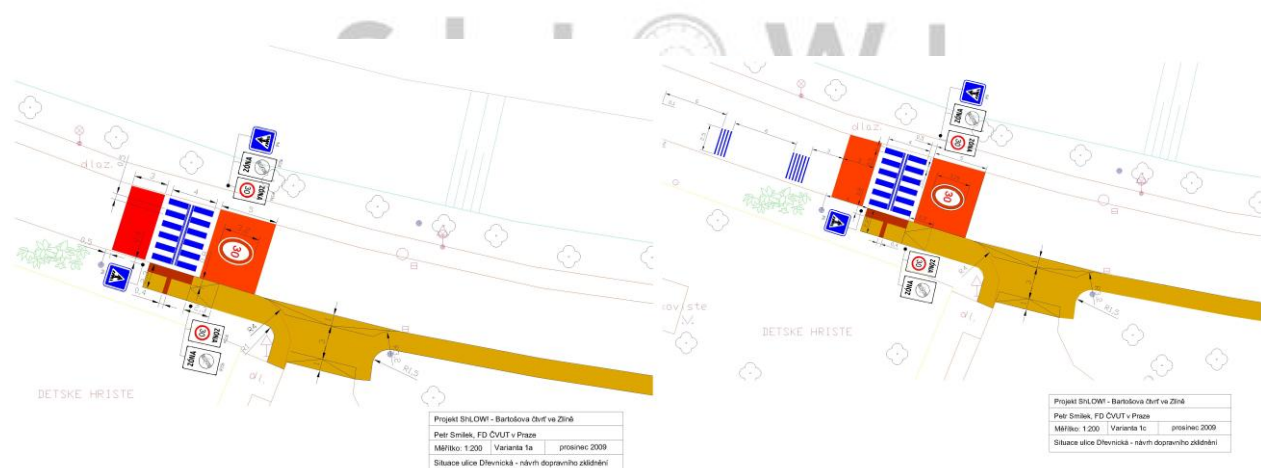


Figure 8 – AutoCAD design of solution

8. 2nd of December - 2nd meeting in Department of Transport of municipal government in Zlín

I gave the [brochure](#) with my proposals of the solution to Ms Andrea Fuskova.

Contacted person: Ms. Andrea Fuskova
specialist in traffic signs
e-mail: andreauskova@muzlin.cz

9. 18th of December – 3rd meeting in Dep. of Transport – Asking for the feedback

I have got an official statement of the attitude to proposals of the solution. (see below)

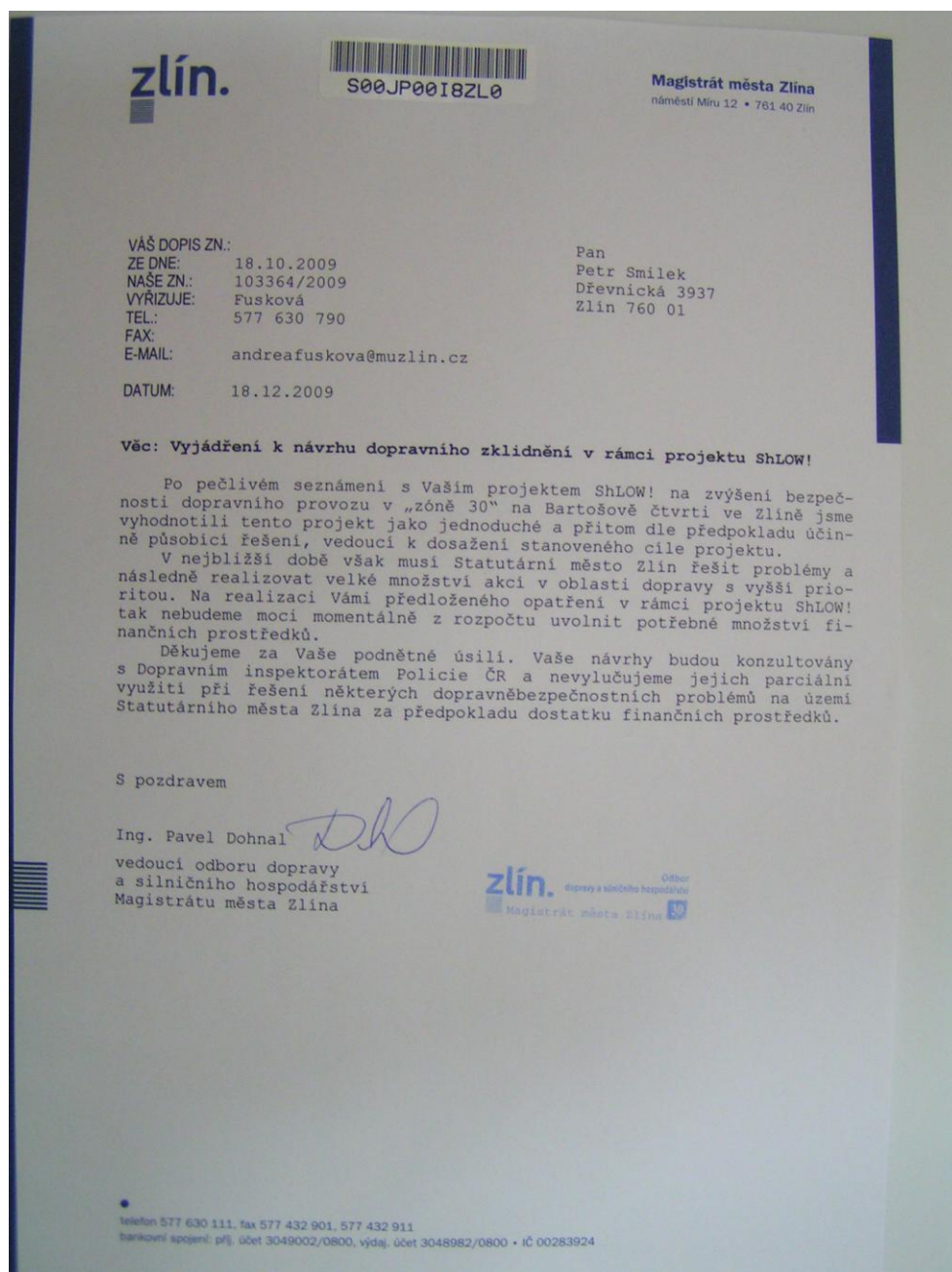


Figure 9 – Photo of the original official statement in the Czech language

English translation:**Re: Statement of proposal of traffic calming in the project ShLOW!**

After conscientious acquainting of your project ShLOW! conducted to the road safety in the 30 kph zone in the residential area Bartošova čtvrť in Zlín we have evaluated this project as a simple and effective solution which leads to the specified target of the project as was predicted.

Statutory town Zlín has to solve the issues and subsequently realize many implements with higher priority in traffic in the near future. We cannot provide necessary quantity of financial resources from our budget for the realization of your proposed measure in project ShLOW! presently.

Thank you for your inspiring effort. Your proposals will be consulted with the Traffic Inspectorate of Police of the Czech Republic and we do not exclude their partial usage in solutions of some other traffic safety issues in the area Statutory town Zlín, in precondition sufficiency financial resources.

Best regards,

Ing. Pavel Dohnal
Head of Department of Transport and
Road Economy of Municipal Government of Zlín



II. Education

1. 20th of September 2009 - Crash test in Faculty of Transportation Sciences in CTU

The Institute of Forensic Experts in Transportation ran a crash test of car Skoda Roomster vs. figurine P6 (6 years-old child, 125cm, 24kg) in the speed of 10kph, 20kph and 30kph, partnership with Skoda Auto a.s. and TÜV SÜD Czech Republic. I was actively attending this project. The records made by the professional cameras were used for making the DVD shots which are the part one of my campaign (see the DVD added to this report as an annex).



Figure 10 – Photos from Crash test

2. November 2009 – Making the campaign clip

I made a DVD clip called "Phenomeon Speed". The runtime is 9 min. 20 s. This clip introduces the 30 km per hour zones to public and it compares the speeds 30 km/h and 50 km/h. The information, which I used in the clip, is from the technical literature, ShLOW! camp presentations and Road Safety Campaigns. Some parts of the clip was borrowed from Youtube server. I have just used it and put together to my clip. This DVD campaign has several versions. The first version which I made is aimed to parents of children of basic school in Bartosova ctvrt neighbourhood in Zlin. The second version was made for driving schools. I hope it will be a good learning tool. This English version is made for the purpose ShLOW! project final report. I added one clip to YouTube website and "Drive slower for a better life!" group on Facebook websites. As a bonus there are 3 slowmotion clips of crash tests. The English version was posted to ETSC to Gabriel Simcic.

3. November 2009 – Design of DVD cover and disc print

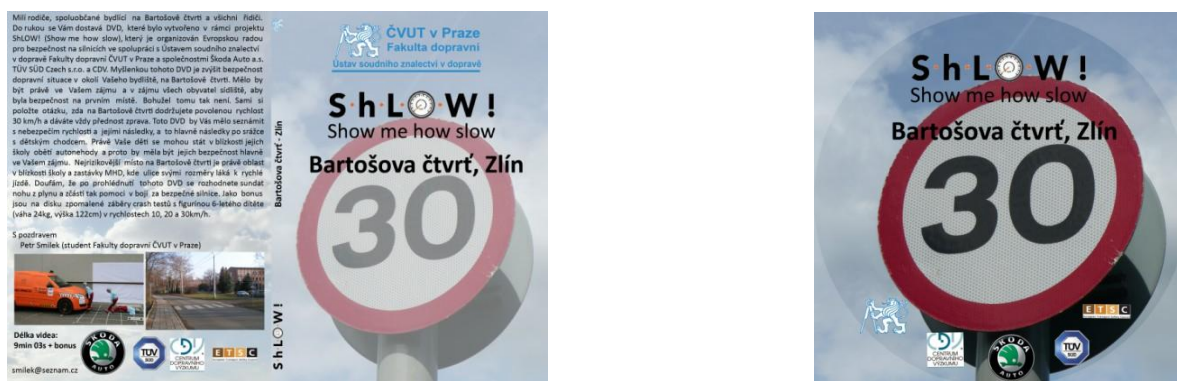


Figure 11 – DVD cover and disc print

4. 3rd of December 2009 – 1st meeting with the headmaster of Basic School Drevnicka Zlín

I introduced the campaign to the headmaster Mr Pavel Vyplel. He gave me an assent to a proposal campaign DVD and cooperation. He watched the clip. The school has 266 pupils so it would be expensive to make 266 copies of DVDs, covers and disc prints. I have arranged with Mr Vyplel that first we will offer this DVD campaign to parents. I will make exactly count of DVDs according to parents' interest.

17th of December – 110 parents showed an interest about campaign

Contacted person: Mr David Vyplel
principal of Basic school Drevnicka, Zlin
e-mail: reditel@zsdrevnicka.cz

5. 18th of December 2010 – Contacted Mrs Vera Krickova (SIK CZ company) – suggestion of spot

I phoned to Mrs Krickova (SIK CZ company) to suggest the short campaign spot to LCD screens which are installed in the vestibuls in the schools all around the Czech Republic. Mrs Krickova showed the interest and my suggestion was given to the hands of her colleagues. I sent the particular suggestion of the idea via e-mail. I have to wait for an official agreement.

Contacted person: Mrs Vera Krickova
SIK CZ company
e-mail: vera.krickova@sikcz.cz
websites: <http://www.sikcz.cz/en/>

Suggestion of spot: The short spot should compare speeds 30kph and 50kph. The Motto of spot is: Do you know that you can uncollisionally stop in front of pedestrian from the speed of 30 kph at the distance at which you cannot even start braking in the speed of 50 kph? This spot will be maximally 30 s long and without the sound. The first screen is: Two cars is going side by side, one at 30 kph, the second at 50 kph. At the same time, in the same place (13 m in front of them) the drivers will see the pedestrians on the road. The first car will stop uncollisionally very close to the first pedestrian. The faster car will hit the second one at 50 kph. The visualization will be in Virtual Crash software, which is used for analysis of road accidents (see below). I have borrowed a student license of this software from UNI. For the illustration video from Virtual Crash click [here](#).

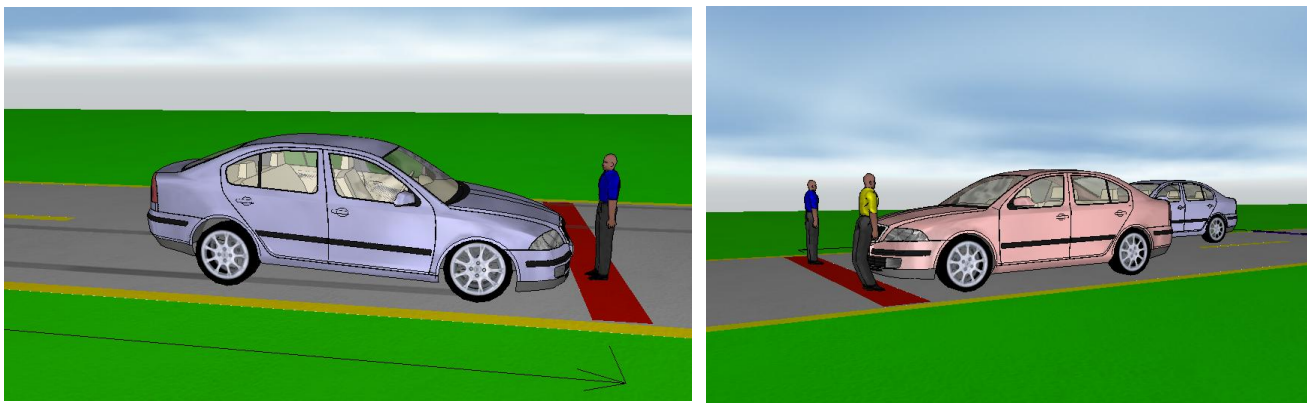


Figure 12 – Photos from Virtual Crash software

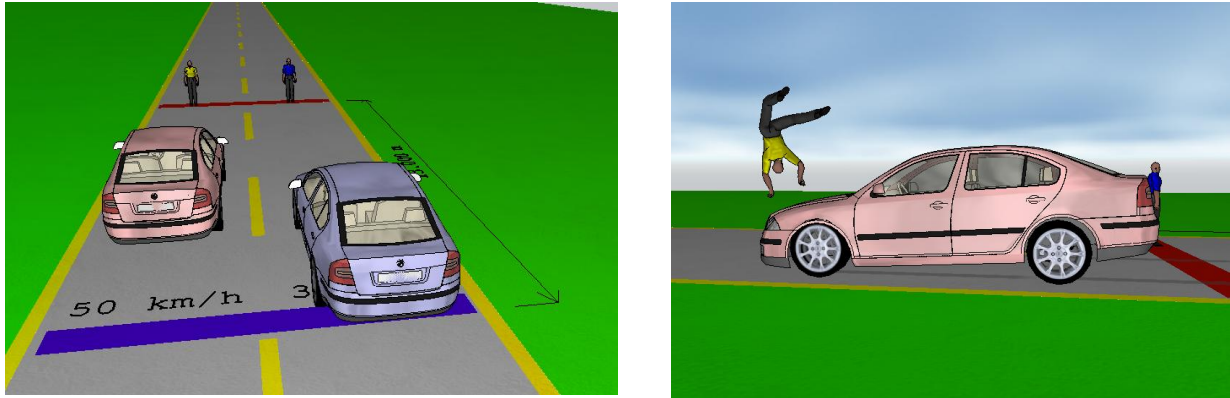


Figure 13 – Photos from Virtual Crash software

6. 4th of January 2010 – Contacted Mr. Jan Bartek – Director

I contacted my friend, young director Jan Bartek for the purpose of the cooperation on making of spot for LCD screens.

Contacted person: Mr. Jan Bartek
 Director, Angel Award for clip of year 2008
 email: honza-bartek@seznam.cz
 websites: <http://www.janbartek.com/>

7. January 2010 – Making the DVDs, printing covers and disc prints

The burning DVDs and printing covers and disc prints are financially and time expensive so ...

All activities are being made with the financial and technical support of Transport Research Centre and the Institute of Forensic Experts in Transportation in Faculty of Transportation Sciences in Czech Technical University in Prague !!

Foreseen activities after the completion of my project

8. January 2010 – All DVDs will be given to the headmaster Mr Vyplel

9. January 2010 – Meeting in several driving schools, DVD will be posted to the rest of driving schools

10. January 2010 – I will probably get the agreement from SIK CZ company

11. February 2010 – Making the short spot for LCD screen with the cooperation of the director Jan Bartek

12. February 2010 – The spot will be sent to SIK CZ company

5. Results and Impact

The first idea (Keeping the safety distance between the vehicles on the roads), which I presented on ShLOW! camp in April 2009 was changed to new one in September 2009. The new project deals with the 30 km per hour zones, exactly one local zone – Bartosova ctvrt in my birth town Zlin, which I focused on. I tried to manage my project from two points of view, as I have been learned at Shlow camp. **INFRASTRUCTURE** and **EDUCATION**. Because I started with this idea quite late, I didn't expect a considerable progress.

From the infrastructure view I suggested several calming in the zone, I focused on the entry gate and the section near the local basic school. These calmings were quite cheap and it could be effective (good rate price/power). I hope that the local authority would have positive attitude. I attended 3 meetings in Department of Transport in Municipal government in Zlin. The infrastructure measures take long time in the Czech Republic. The success depends on many factors and circumstances. The most important one is the municipal budget. The second factor is the political situation, which is very specific in the Czech Republic. These two factors are very connected with each other. This is my opinion. There are many people in the local authorities and ministerial posts, which are being influenced from many ways. It is only dirty policy. There are a lot of clerical workers in authorities in the Czech Republic, and this fact influences the success to reach some finish in appropriate time a lot. It is only foolish bureaucratic procedure. However, I got an official statement from the Department of Transport in Zlin which says that my suggestions are not possible to realize in the near future because of the budget. The Bartosova ctvrt is not the prior black spot in town Zlin and my suggestion would be used at another realization of calming in another location. My suggestion can be an apposite example. (for the whole official statement see page 8). So that is all I could do, as a student, for an implementation of my idea from the infrastructure point of view.

From the educational view I have come up with two ideas: DVD campaign aimed to parents of pupils of basic school in Bartosova ctvrt, DVD campaign aimed to students of driving schools in Zlin. The results and impact are not possible to acquire in time which I have got for this project. The feedbacks from parents may come in longer time. These target groups are being given DVDs in days you read this final report. The last idea, third one, came very late. It is short spot for LCD screens, owned by SIK CZ company, in schools in the Czech Republic. If my suggestions will be agreed, I am going to carry on foreseen activities to reach success finish.

During the time I have been working on my project, I have met and talked to many people from traffic profession or another professions. You can see their names and contacts on some items of the part 4 – Activities carried out. As a student, finally, I realized that the theory and the practice are very far away from each other. Anyway I would like to thank everybody who helps me with my project and gives me a support, especially Mr. Tomas Micunek from the Institute of Forensic Experts in Transportation in Faculty of Transportation Sciences at Czech Technical University in Prague and Mr. Jiri Ambros from Transport Research Centre.

For better quality pictures from this report see [the ShLOW! Forum](#) on ShLOW! web sites. The campaign on DVD disc should be attached to this report.

Thank you. Best Regards.

Petr Smilek, Czech Republic