

*Tallinn, Estonia, 26.04.2012*

## **STARS Project description**

**Names : Edgar Berman, Rivo Bonder**

**City/University : Tallinn University of Technology**

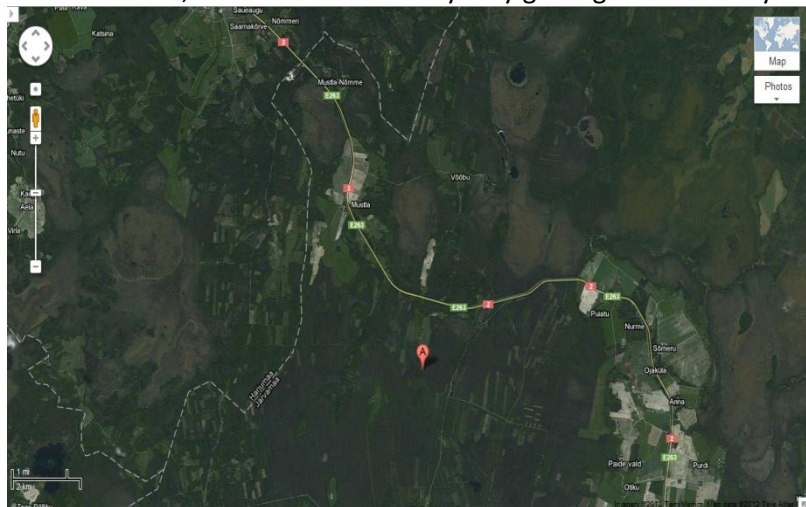
**Project name (if any) : Decreasing average speeds on Estonian Highway E263 near Ussisoo**


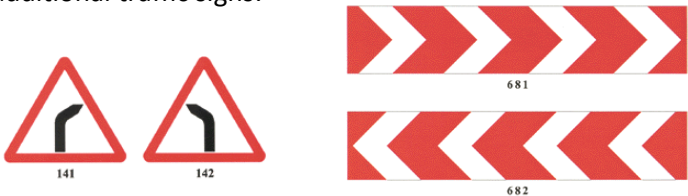


**Context**  
**Identified site**

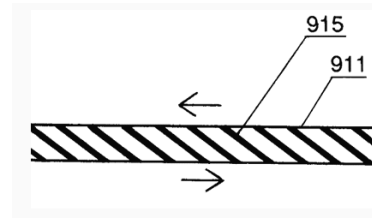


We have identified a specific site for our project. It is E263 Tallinn-Tartu-Võru-Luhamaa highway, section 65-75 kilometres, near Ussisoo. The section is known for its high rate of collisions. The reasons why accidents occur are the following: the road is located between swamps, which means fog and black ice in wintertime are not rare to occur. In this section all drivers tend to start takeovers, because between and after the section takeovers are forbidden. It also has some visibility issues and it is endangered by animals crossing the highway. It is situated 70 km from Tallinn and 110 km from Tartu, so if drivers are driving from Tallinn to Tartu or vice versa, then at that time they may get tired and lazy.



	<p>We have access to all statistics regarding the accidents and collisions, including statistics for injured people and fatalities. We did not have the time to look into it yet, but we have talked to Estonian Police and they gave us the website of their statistics.</p> <ul style="list-style-type: none"> <li>- Road safety experts agree, that this section of the road is indeed dangerous, but not the most dangerous section on E263. Regardless of that, we would like to stop people from referring to the section as the Bermuda Triangle on the highway. Our professors from university are positively tuned for carrying out a project on that site.</li> </ul>
<p><b>Ideas</b></p> <p><b>Objectives</b></p>	<ul style="list-style-type: none"> <li>- On the website <a href="http://www.mnt.ee/public/kiirused3.pdf">http://www.mnt.ee/public/kiirused3.pdf</a> can be seen, that speed limit for cars and motorcycles in summer period is 100km/h. The rule does not expand to buses and lorries. People travelling with maximum allowed speed have to overtake in order to keep steady speed. We think that on the road, where is plenty of traffic and overtaking places are limited, the speed limit 100km/h in summer needs to be cancelled.</li> </ul> <p>Saving in time while travelling 10km/h faster for 10 km(the length of our section) is only 39 seconds. This fact makes raising the speed limit even more fractional:</p> $90 \frac{km}{h} = \frac{90 km}{60 min} = 1,50 \frac{km}{min}; \quad 10 km : 1,50 \frac{km}{h} = 6 \text{ min } 40 \text{ s}$ $100 \frac{km}{h} = \frac{100 km}{60 min} = 1,66 \frac{km}{min}; \quad 10 km : 1,66 \frac{km}{h} = 6 \text{ min } 1 \text{ s}$ <p>We have been thinking to set up additional traffic signs on kilometres 65 to 75. Idea is to inform drivers of the danger in Ussisoo highway.</p> <p>Add reflective traffic signs as shown on the picture:</p>  <p>Curves, where have been lots of collisions should be marked with additional traffic signs:</p> 

At places where have been collisions caused by overtaking, deny the overtaking with traffic signs. In addition we are planning on changing the road covering to permanent line. Where the road width allows, more efficient solution could be detached island between road directions.



Effective highway edge marking. Edges should be marked with multi-dot-line technology, where water stays on the marking while reflecting the light also in rainy conditions.



**Kammjoon**

The main objective of the project is to decrease collisions on dangerous highway and we think that these relatively cheap solutions bring us closer to our achievement.



**Strategy**

**Partners**



- Our first idea was to put a car wreck with a billboard with a message on it near the highway and additional reflective traffic sign. That idea was denied due to the fact that it is forbidden to put any additional billboards nearer to 50m to the highway. We could not put it more far away because we would have to chop trees in order to do that, and we left the first plan as it was.
- Our plan B was to decrease the speed limit in Tallinn city central area from 50km/h to 40km/h. We got access to the research project carried out in 2010, when they were thinking about decreasing the speed limit in Tallinn. The report concluded that it would give more benefits than expenses. But still it was not implemented that time. So we talked to local authority why the project was cancelled, we faced many shut doors and we decided to leave the plan B as well. With our professor in university we concluded that the project was made to secretly fail in Tallinn in 2010, just to have some political propaganda, and so local authority did not want anything to do with it.

Although we faced problems in both ideas, we found some contacts from Estonian Road Administration who were interested in our project implementation. They gave us the idea to implement the billboard and a car wreck to rest areas near the highways, so it could be seen from the highway as well. We made a documentation for Estonian Road Administration in which we showed where, how and why we would like to implement it. But we cancelled working on it as we realized that it would not be so effective and we could not measure the effectiveness in any way.

Alard Tallo from Estonian Road Administration gave us feedback all the way as we discussed our project ideas with Estonian Road Administration and our professors from university. He gave us many ideas regarding our ideas, which

	<p>some of them we are now trying to implement (see "Ideas Objectives"). The reason is that if someone from Estonian Road Administration already suggests these ideas, it may be a chance to get it implemented.</p> <ul style="list-style-type: none"> <li>- We are now waiting for final approval from Estonian Road Administration, whether to change some points in project or get it approved. As we get it approved, we will start looking for exact positions on that section where to apply our ideas. We will also start looking for partners and sponsors, although if we are very lucky, Estonian Road Administration will cover these costs.</li> <li>- If we still face Estonian Road Administration refusal, we would need ETSC to write us a confirmation letter that you support our ideas. But it still depends on whether they will not be satisfied at all regarding this project, because if they want us to change some points in it, we could do it on our own.</li> </ul>
<p><b>Communications</b></p>	<ul style="list-style-type: none"> <li>- We will contact and inform press about our project as soon as we get it approved from Estonian Road Administration. We would like to have some support from people. Regardless of that, we have not talked to press at the moment.</li> </ul>
<p><b>Evaluation</b></p>	<ul style="list-style-type: none"> <li>- We have planned to start pre evaluation on the section from next week(30.04.2012). The reason is that in Estonia weather has started getting warmer and with that, people tend to forget their lower speeds which they had in wintertime. So in that way we will have better results to compare after project implementation.</li> <li>- We will compare the results before and after implementing the project and see if the average speeds of drivers have been dropped. We will conclude our project with graphs and final report.</li> </ul>
<p><b>Observations</b></p>	<ul style="list-style-type: none"> <li>- Our main difficulty is lack of time. It is hard to divide time between implementation of STARS project, working full-time and spending a lot of time studying in the university. We will try our best to complete the project in time.</li> <li>- Another difficulty is having a lot of closed doors on our ideas. Although we hope that with our last idea (see "Ideas Objectives") we are able to succeed and start moving towards actual implementation.</li> <li>- We hope to get answers from Estonian Road Administration by the start of June, so the actual works on Ussisoo section will hopefully begin somewhere in mid-July. Final evaluation will be made in August or September.</li> </ul>