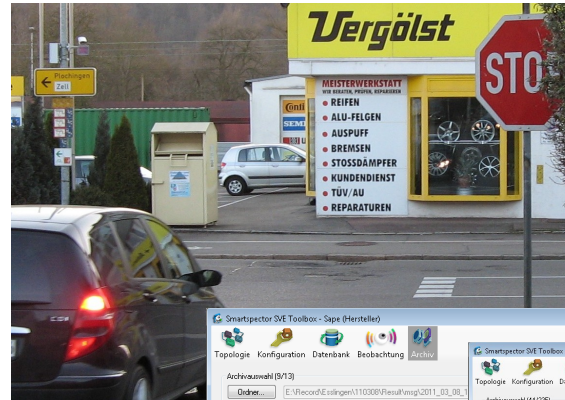


SMARTSPECTOR Stop!Detector® Compliance analysis in Germany provides evidential reasoning to improve road safety



Customer/Partner: The urban administration of Esslingen am Neckar, a major city in the Stuttgart region in southern Germany, gets granular on road safety. At an empirically risky crossing, emphasis was particularly set on the driver's behaviour in the ambit of the stop line. All investigations had to be carried out unaffectedly and anonymously. The results of data ascertainment shall aid as a solid basis of implementing actions towards improved road safety.

Sensor configuration: A self contained Stop!Detector® system was installed approximately 15m away from the stop-line, circa 4m above road level. The whole equipment could be fixed at a pre-existing lamp pole, obliquely positioned to the side road. To handle the cross traffic that temporarily covers tracked vehicles, appropriate parameter settings seized a profound documentation and consideration of the real world situation even in those cases. All measurement results were recorded by means of a compact PC, which was integrated in an electrical cabinet next to the camera device.

Analysis: The system automatically generated a detailed report for every single vehicle passage, and also provided a general survey via a passage list in chronological order. To guarantee highest reliability, every passage was validated manually by using the Smartspector SVE-Toolbox. As the validation procedure mainly relies on the examination of single result images, the effort to accurately prepare a meaningful analysis report was restricted to an essential minimum.

Statistics: Less than 50% of all turn left passages (moving towards right in the result image), and barely 25% of all turn right passages showed compliant behaviour. A significant part of all observed passages including a standstill period actually arose by impossibility to misdemeanour - due to actual traffic on the main road.

Conclusion: Only a few motorists strictly adhere to the regulations in the ambit of stop signs. This fact is caused by a lack of awareness and hardly existent enforcement activities today. Temporarily stopping a vehicle means additional energy demand and an additional delay. From the drivers point of view, a proper behaviour is associated with more disadvantages than with benefits. However, a reliable stopping is an important issue regarding road safety. Awareness building measures and the establishment of intensives towards compliance have been proposed within the analysis report. Both activities are of paramount importance to alleviate the identified level of endangerment on-site.

ID	Date	Time	Qual	Speed
4840	2011/03/08	15:06:03	3	13
4841	2011/03/08	15:06:15	1	0
4842	2011/03/08	15:06:31	6	5
4843	2011/03/08	15:06:18	1	0
4844	2011/03/08	15:06:56	6	26
4845	2011/03/08	15:07:00	3	23
4846	2011/03/08	15:07:33	4	0
4847	2011/03/08	15:07:37	1	0
4848	2011/03/08	15:08:03	1	0
4849	2011/03/08	15:08:13	3	13
4850	2011/03/08	15:08:41	3	15
4851	2011/03/08	15:09:19	6	6
4852	2011/03/08	15:09:35	6	8
4853	2011/03/08	15:10:39	6	9



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Version: 110402

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