Opponent review of the diploma thesis

"Methodology of the Positioning Performance Testing in Car Navigation"

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The presented thesis consists of 7 chapters plus preface and conclusion, its extent is 76 pages. In addition one can find 10 more pages of text appendices.

Formal aspects of the thesis are on a good level. There is a lot of illustration materials, texts are clear, easy to read. Bibliography contains more than 20 relevant references. A list of abbreviation with explanations is in Appendix A. From a point of the content, the work is complex, logically composed, leading a reader from theoretical findings, through description of used tools, up to the practical part, which was worked out in cooperation with Skoda Auto development. Just this practical part of the thesis I found as the most valuable, since it apparently required a lot of effort to work out, analyze and evaluate relatively high volume of measured data.

Although an overall appearance of the diploma thesis is very good, two main observations negatively influenced its overall evaluation:

1. Despite of the extent of the thesis there is an enormous use (in first 3 chapters and a part of fourth as well – i.e. up to page 39!) of full text citations (quotations) mostly from papers. This is not standard approach for work of this kind. The recherché is expected to be derived from the original works in a form of summary with author's own critical contribution, comparisons in between particular sources are supposed and conclusions relative to the topic of his work should be sketched. The full citations are reasonable and needed only in the cases where changed interpretation of the original text may deviate its original sense. The same holds for citation of generally known and available resources (norms etc.).
2. The practical part of the thesis, starting with chapter 4 to 7, is written in a "descriptive form". In many cases it verbosely describes relatively obvious facts, details around applications usage, entries in the database (or Excel list) and notes, which may be important for the users of the Skoda software but have no general value for reader. Some of very simple formulas are not worth to be presented in diploma thesis (p.64). The text is then losing its technical character and looks like user's manual.

I recommend the thesis for the defense, with classification grade **C (good)**.

Questions and remarks for the defense:

1. Summarize the state of the art in testing upon your experience.
2. In chapter 3 and 4 the measuring methodology is introduced. Skoda methodology is used for the rest of the work because the experiments were realized with Skoda Auto. Explain (if there are some) differences in between Skoda methodology and that optimal one which would be a result of recherché.
3. In practical part it is not easy to see what author's original work is and what is adopted from Skoda. Please summarize your main contributions in practical part of the thesis.

Prague, January 10th, 2016

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