I. IDENTIFICATION DATA

Thesis name:	**Simulation of passenger lift in Witness software**
Author's name:	**Stanislav Khomytskyi**
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Electrotechnology
Thesis reviewer:	Ing. Jan Jirsa, Ph.D.
Reviewer's department:	UniControls, a.s., Křenická 2257, 100 00 Praha 10

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	**ordinarily challenging**
Evaluation of thesis difficulty of assignment.	
Topic of the thesis involves solving of an adequate technical problem.	

Satisfaction of assignment	**fulfilled**
Assess that handed thesis meets assignment. Present points of assignment that fell short or were extended. Try to assess importance, impact or cause of each shortcoming.	
The thesis assignment was fulfilled.	

Method of conception	**correct**
Assess that student has chosen correct approach or solution methods.	
Student has chosen correct approach. He started with analysis and continued with work on simulation model, where the theoretical aspects were verified.	

Technical level	**C - good.**
Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.	
Student had to learn new skills for successful creation of model in Witness simulation tool. However, he could use more information from the sources and Internet for description of the model behavior. I would be also expecting more simulation exercises with the model.	

Formal and language level, scope of thesis	**E - sufficient.**
Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.	
Formal notation of the thesis is very poor, including language quality. Some subchapters' titles are not emphasized. Text also contains grammatical errors. Algorithms used in models could be added into appendices in form of some standardized notations.	

Selection of sources, citation correctness	**D - satisfactory.**
Present your opinion to student's activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.	
Correct reference is missing in first paragraph of subchapter 2.2.5. In my humble opinion the list of study materials could be larger. For example: there is no mention of similar work "Modelling a Multi-car Elevator System using Witness" presented in International Journal of Innovation and Applied Studies, ISSN 2028-9324 Vol. 4 No. 1 Sep. 2013, pp. 20-27.	

Additional commentary and evaluation	
Present your opinion to achieved primary goals of thesis, e.g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.	

Functional scheme of the model (Fig. 3.1) is just a block diagram. It contains following logical mistake: direction of arrows between Elevator and Buffers is in contrast with their direction in the model.

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation. Please present apt questions which student should answer during defense.

The thesis could be worked out more precisely and deeply, especially in simulation part. Specification of simulation scenarios is missing. Therefore it is not clear if the models simulate traffic in some public or private building, hospital or somewhere else. It's a pity, because today's simulations provide a possibility to model a variety of real situations.

Questions:

1. There are just five floors in simulation model. Why?
2. Is it possible to model some reliability aspects in Witness (e.g. failure of elevator and its repair) and their influence to passengers' throughput?
3. The functional scheme of the model is just a block diagram without any functional or behavioral description. Why didn't student use other suitable diagrams for this purpose?

I evaluate handed thesis with classification grade **D - satisfactory.**

Date: **8.6.2016**   Signature: