SUPERVISOR'S OPINION OF FINAL THESIS

I. IDENTIFICATION DATA

Thesis name:	**ETIS - Application for Evaluation of Ticketing and Information Systems**
Author's name:	**Bc. Petr Hnyk**
Type of thesis :	master
Faculty/Institute:	Faculty of Transportation Sciences (FTS)
Department:	Department of Transport Telematics
Thesis supervisor:	Ing. Milan Sliacky, Ing. Martin Langr, Ph.D.
Supervisor's department:	Department of Transport Telematics

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment   **challenging**

Evaluation of thesis difficulty of assignment.

Developing an application that meets all requirements could be challenge.

Satisfaction of assignment   **fulfilled with minor objections**

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.

All main parts of application were implemented and selected data about 53 Public Transport Systems were inserted to the application (but not all systems contain a complete dataset). Methodology of parameters collection is described and basic analysis examples are presented in thesis. information on how to select quality parameters of PT systems is very brief. Suggestions to improve one of compared public transport systems are not based on the results of analysis made by application (as requested in assignment) but on personal experiences of the student.

Activity and independence when creating final thesis   **C - good.**

Assess that student had positive approach, time limits were met, conception was regularly consulted and was well prepared for consultations. Assess student's ability to work independently.

Consultations with the supervisor were minimal. Student has worked on his thesis independent.

Technical level   **A - excellent.**

Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.

Knowledge of public transport systems and programming is on high level. There are good description of ticketing and information systems and their important characteristics are mentioned. The application's user interface is at a very high level.

Formal and language level, scope of thesis   **B - very good.**

Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.

Very good typographical arrangement and good language level.

Selection of sources, citation correctness   **A - excellent.**

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.

It seems that lot of the information comes from the author's experience, but the use of sources in the text and the selection of the sources is at a standard level.

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.
According to my opinion the primary goals of thesis were achieved. The developed application works correctly, and user interface of the application is on professional level.

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

The general level of diploma work is very good – written part as well as the web application. Suggestions on how to improve one of compared public transport systems (PID system was chosen) are based on personal experiences of the student instead of application analysis results, but they are very reasonable.
The developed application ETIS has a great potential to become a truly used tool for at least PT system comparison, e.g. visualization of tariff plans for PT systems on the map for Google or Seznam that is implemented in the application is worldwide unique and according to me useful feature.

I evaluate handed thesis with classification grade **B - very good.**

Date: **11.6.2018**   Signature: