ČESKÉ VYSOKÉ UČENÍ TECHNICKÉ V PRAZE

REVIEWER'S OPINION OF FINAL THESIS

I. IDENTIFICATION DATA

Thesis name:	**Distributed Queuing-based Random Access Procedure in Mobile Networks**
Author's name:	**Bc. Yang Ping-Hsun**
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Telecommunication Engineering
Thesis reviewer:	Ing. Jan Zelenka
Reviewer's department:	T-Mobile Czech Republic a.s.

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment **challenging**

Evaluation of thesis difficulty of assignment.

The work deals with the perspective worldwide used mobile communication technology, reflects the growing number of end users resulting in increasing demands to a signalling part of a device communication, especially the access procedure to radio resources.

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 work fully meets the challenging assignment.

Method of conception **correct**

Assess that student has chosen correct approach or solution methods.

Student has summarized the related work topics, described the basics of Random access procedure in LTE networks, introduced the DQRAP method and described the methodology of testing the mentioned method. Finally, the outcomes were presented.

Technical level **B - very good.**

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

The technical level of the work is very good with minor details, e.g. missing units in Tab.1 or inaccurate values if Figure 14 (see below)

Formal and language level, scope of thesis **A - excellent.**

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

The work organization, language and terminology are on a high 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.

The resources used in the work are chosen well and used in a right manner.

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.

Please insert your commentary (voluntary evaluation).

REVIEWER'S OPINION OF FINAL THESIS

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.

Pros:

All the work is very consistent, the theory basics are described systematically, the train of thoughts is without gaps. It is obvious that student fully understands the common mechanisms of the topic and the work can be used like a studying material.

Cons:

See question below.

Question:

On Figure 14 there is depicted the average maximum access delay for devices requiring the access to radio resources. The scale of Y-axis is in order of hundreds seconds. I cannot imagine such a long time to access the medium in real mobile networks. Can you explain the information resulting from the mentioned Figure?

I evaluate handed thesis with classification grade **A - excellent.**

Date: **8.6.2016** Signature: